Innovatint

LAB

User Manual

From:

Chromaflo Technologies
Vernissakatu 1
FIN-01300 VANTAA,
FINLAND

P.O. Box 42
FIN-01301 VANTAA,
FINLAND

System Support:
Tel. +358 207 188 000
Fax. + 358 207 188 020

Table of Contents

1 INTRODUCTION 5

1.1 MAIN FUNCTIONALITY 5
1.2 NAVIGATION IN PROGRAM 6
1.3 STARTING INNOVATINT 7
1.4 DATABASE OVERVIEW 9

2 CONFIGURATION 15

2.1 COLORANTS 16
2.2 CAN SIZES 22
2.3 ABSTRACT BASES 25
2.4 UNITS 27
2.5 PRODUCTS 29
2.6 COLOR MANAGEMENT 40
2.6.1 Color cards in system 41
2.6.2 Color cards 43
2.6.3 Measure 47
2.6.4 Colors 52

3 MATCHING & CHARACTERIZATION 62

3.1 CHARATERIZATION SET 63
3.1.1 Set components 65
3.1.2 Proposer 73
3.1.3 Colorants 77
3.1.4 Bases 87
3.1.5 All 97
3.1.6 Base character set 101
3.1.7 Test 103
3.2 MATCHING RULES 107
3.2.1 System specific 108
3.2.2 Product specific 111
3.3 COLOR MATCHING 113
3.3.1 Matching settings 114
3.3.2 Statistics 123
3.3.3 Results 129
3.3.4 Color correction 143
3.3.5 Dispense queue 156
3.4 FILL RGB(S) 157

4 MANAGEMENT & ANALYSIS 158

4.1 ZONES 159
4.1.1 Products in zone 163
4.1.2 Products in group 167
4.1.3 Color cards in zone 170
4.2 FORMULA MANAGEMENT 172
4.2.1 Batch operations 184
4.2.2 F-link inbox 189
4.3 PRICING 193
4.4 OTHER 207
4.5 EXPORT AND IMPORT 210
4.5.1 Export from the current database into the Innovatint database 212
4.5.2 Export from the current database into the fix-file 219
4.5.3 Export from the current database into the free text 225
4.5.4 Export from the current database into the database installation package 237
4.5.5 Export from the current database into the shop database installation package 244
4.5.6 Synchronize from the current database into the minimal Gdata 251
4.5.7 Export from the Innovatint database into the current database 253
4.5.8 Export from the Colour Composer 9 database into the current database 261
4.5.9 Export from the Gdata into the current database 270
4.5.10 Export from the Gdata into the free text 280
4.5.11 Export from fix-file into the current database 297

4.5.12 Export from free text into the current database 304
4.5.13 Export from Colour Composer list into the current database 320
4.6 STATISTICS 326
4.7 SITE INVENTORY 336

5 OPTIONS 338

5.1 DISPENSERS 339
5.2 PRINTERS 340
5.3 SPECTROS 341
5.4 ACTIVATION 347

6 SERVICES & REPLICATION 351

6.1 NETWORK SERVER SETUP 352
6.2 USER MANAGEMENT 355
6.3 BACKUP 356
6.4 REPLICATION 360

7 APPENDIX 1: EASYPRINT MANUAL 371

General

© COPYRIGHT 2010, Chromaflo Technologies. - All rights reserved in all countries. No part of this material may be translated into any other languages and/or adapted and/or reproduced in any form, or by any means, electronic or mechanical, including but not limited to photocopying and recording, without prior written permission of Chromaflo Technologies.

Information in this manual is subject to change without notice and does not represent a commitment on the part of Chromaflo. Any reference to companies, names, dates and addresses used in the screens and/or examples is purely accidental, unless otherwise stated, and is intended solely to clarify use of the Chromaflo Technologies products.

Chromaflo shall not be liable for technical or editorial errors or omissions made herein; nor for incidental or consequential damages resulting from the performance or use of this material.

The names of the products used might be trademarks or registered trademarks of their respective companies.

(Reference software version 1.4)

v.2013.02.12

1 Introduction

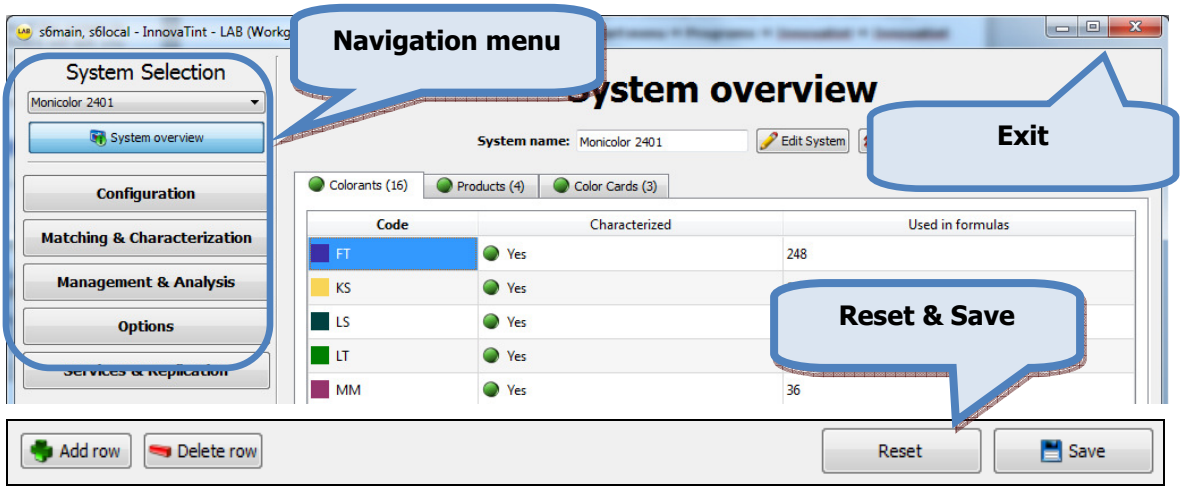
1.1 Main functionality

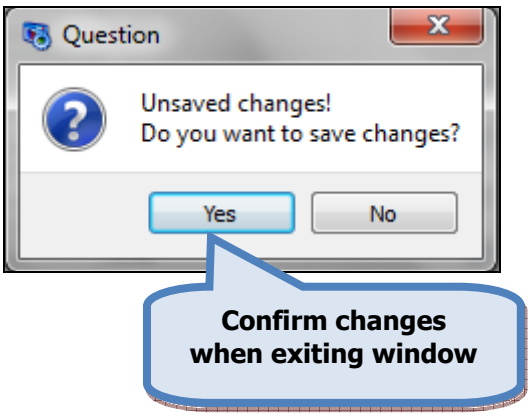
The main functions of Innovatint Lab software are:

- To manage tinting formula database and color card information
- To transmit the dispensing instructions to the driver program of the dispensing machine
- To backup and restore the formula database
- To communicate with a spectrophotometer, and to look up and calculate new color formulae based on the measured values
- To calculate the price of the dispensed product
- To collect statistics of the tinted products
- To manage Shop database and replication process
- To create tinting systems and manage components of them

1.2 Navigation in program

Throughout the whole manual, you can use navigation menu, on left side of the screen to navigate between different pages in software. When making any change, software will ask you to confirm changes when leaving one window, unless you have already clicked **Save** button on the screen. At any time, you can undo any change you have done to the page, by clicking **Reset** button. Please do notice that both **Save** and **Reset** buttons are inactivated unless you have done any changes. Use X button on top-right corner on the window to exit program.





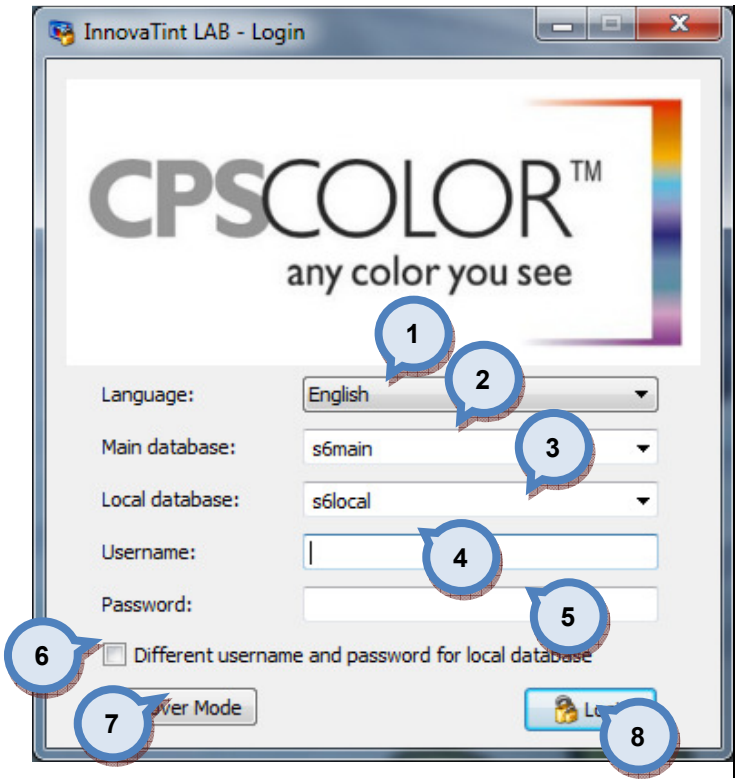
Some of the pages contains **Back** and **Next** buttons. With these buttons you can either go back to the previous page or to proceed to the next page on the process.

1.3 Starting innovatint

Innovatint LAB can be opened by using the desktop short cut, or from the start menu.

Start menu ⇨ Programs ⇨ Innovatint ⇨ Innovatint Lab

When starting the program, the Login -window opens up, and you have the following options available:



1.Languange: The button to select Language for user interface from the drop-down list.

2.Main database: The button to select the Main database from the drop-down list.

3.Local database: The button to select the Local database from the drop-down list.

4.Username: The text field to type in the Username.

5.Password: The text field to type in the Password.

6.Different username and password for local database: Check box to enable the use of different username and password for local database.

7.Recover mode: The button to recover previously used database.

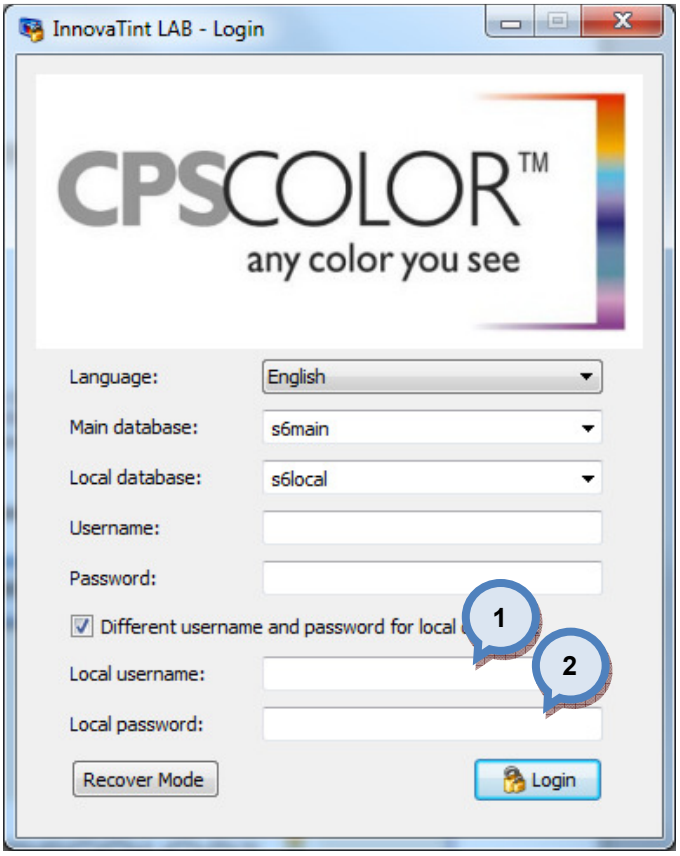
8.Login: The button to login.

The default configuration has 4 user names:

ITR	= Data reader privileges	default password = **ITR**
ITU	= Data user privileges	default password = **ITU**
ITA	= Data administrator privileges	default password = **ITA**
dba	= Database administrator privileges	default password = **sql**

It is highly recommended to change dba username. See further instructions in section 6.2.

When check box **Different username and password in local database** is enabled, following extra options are available in the Login window:



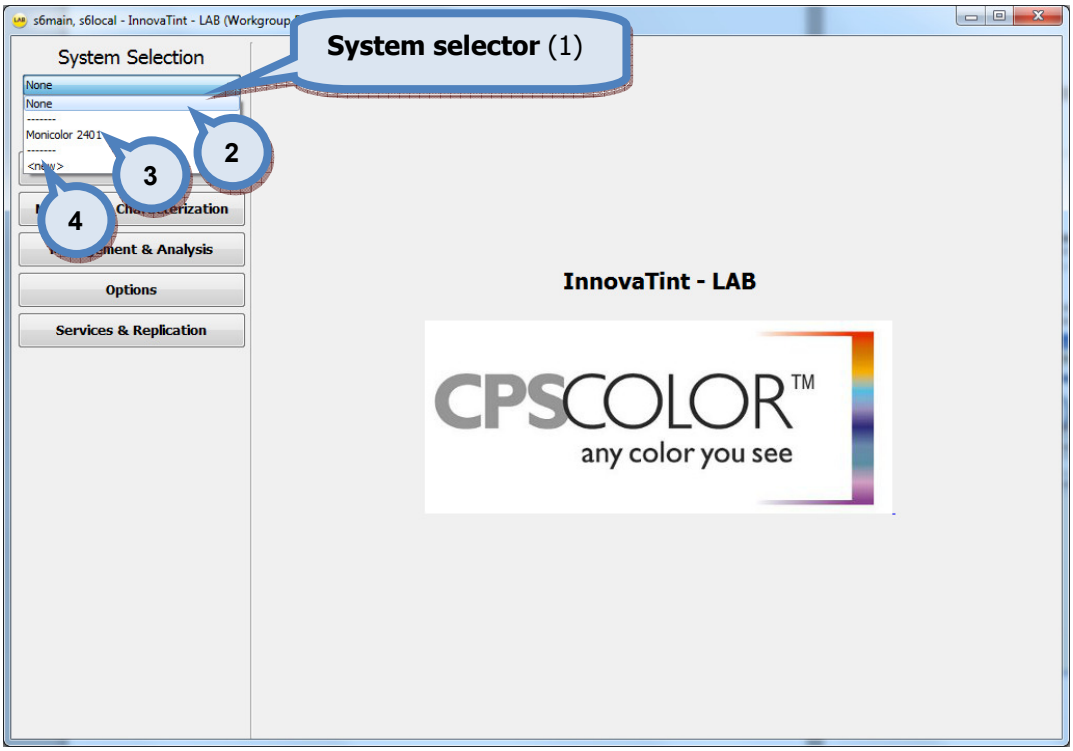
1.Local username: The text field to type in the Username for local database.

2.Local password: The text field to type in the Password for local database.

1.4 Database overview

In the **Database overview** page, you can view colorants, products, and color cards in whole database or in the selected system. In this page you can get an overview of all components in the database, and you can create a new system (name) in to the database.

In the main window, you have **System selector** (1) drop down list. In this list, you have following options:

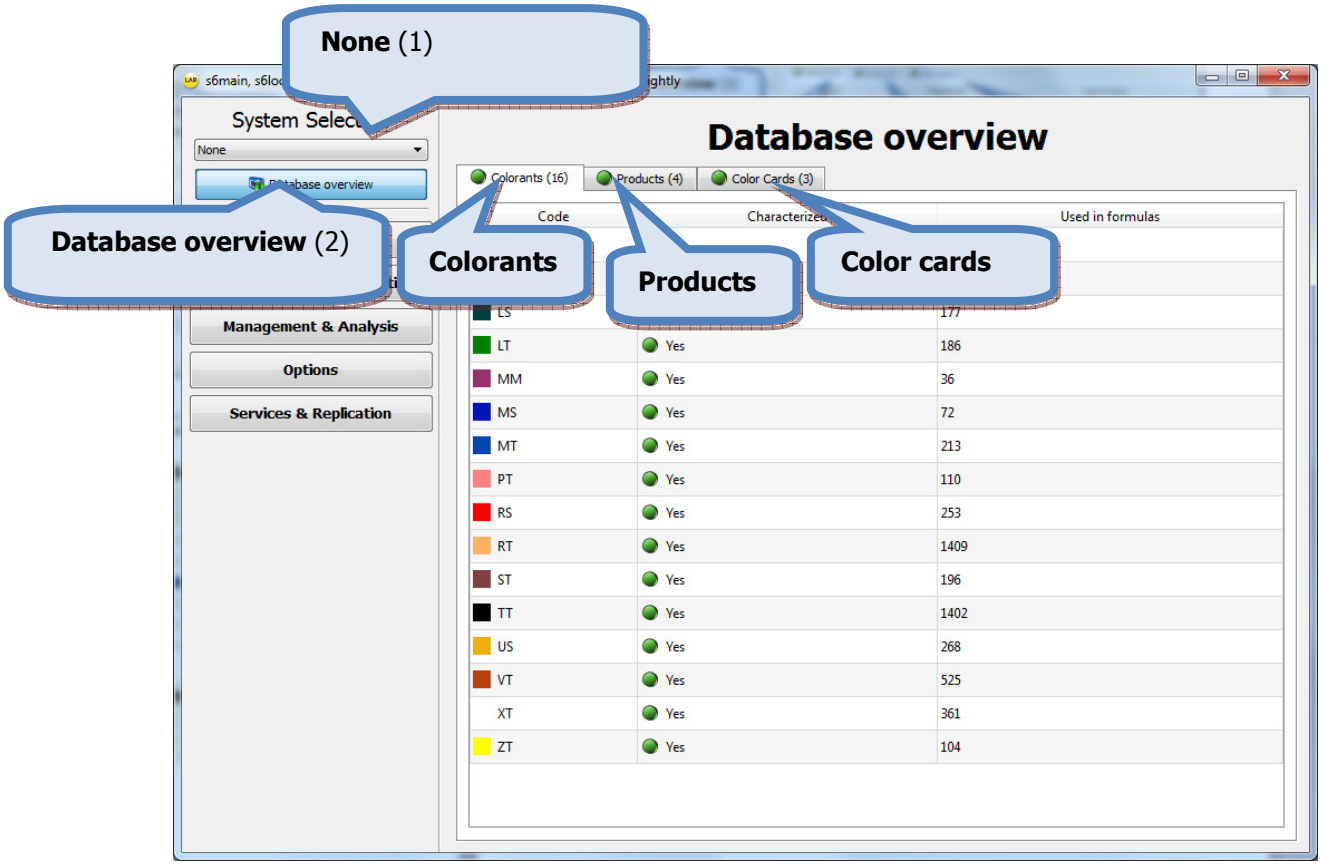


2.None: Select None to see whole database.

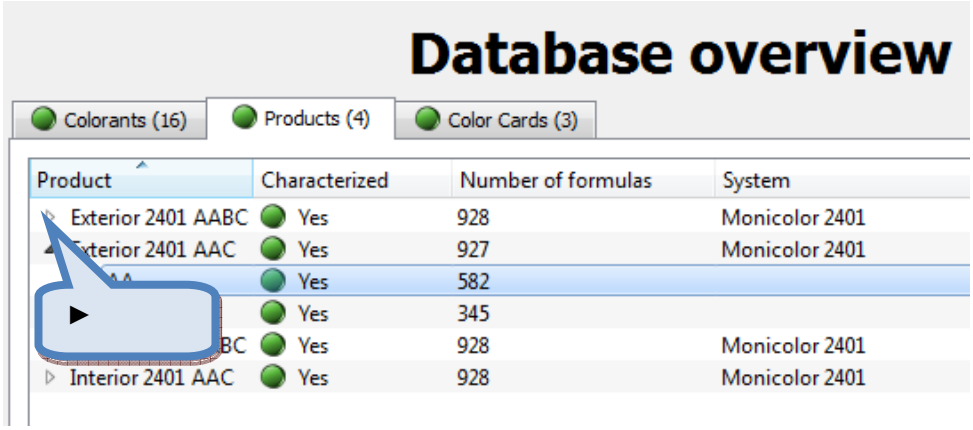
3.Monicolor 2401 i.e. system name: Select system name to see system.

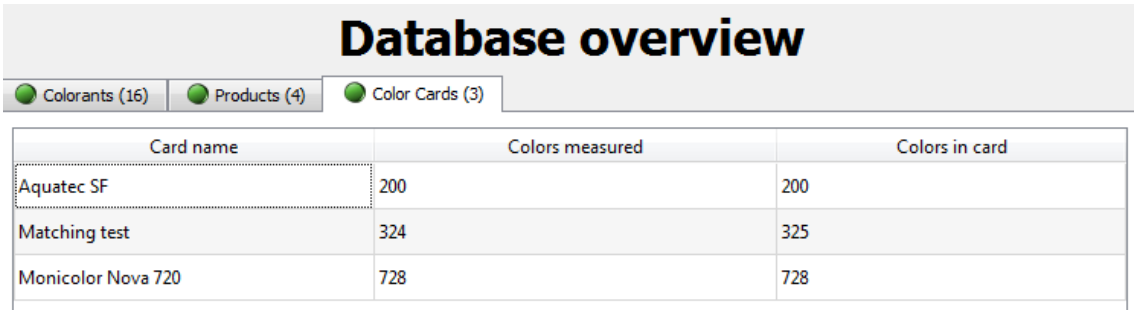
4.<new>: Select <new> to create new system (name).

When selecting **None** (1) as a system (the whole database) from the system selector drop down list and the **Database overview** (2) button is clicked, following window opens up. This page has 3 tab pages: **Colorants, Products,** and **Color Cards**.

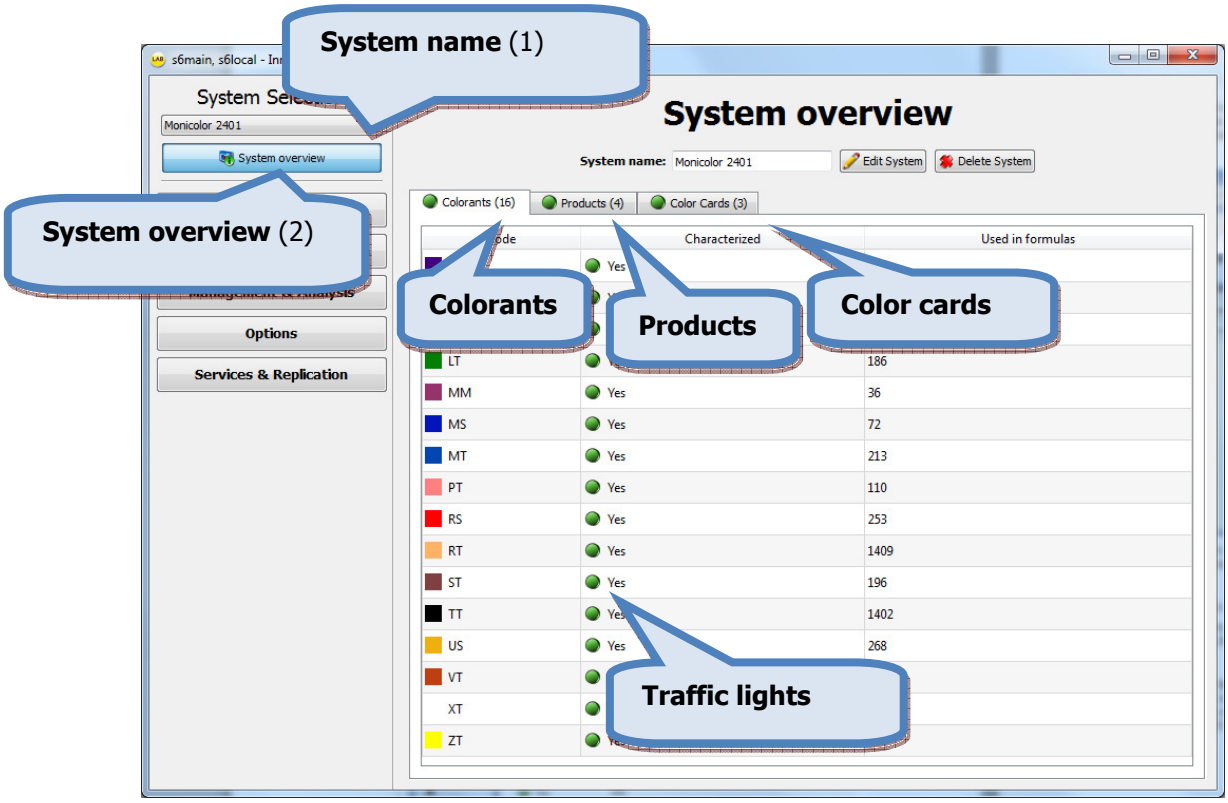


Colorants, products and color cards in database can be viewed by clicking on the corresponding tab page headers. Click on the ►- button to navigate to the lower levels on the product hierarchy.





When selecting **System** (1) name is selected from the system selector drop down list and **Database overview** (2) button is clicked, following window opens up. This page has 3 tab pages: **Colorants, Products,** and **Color Cards**.



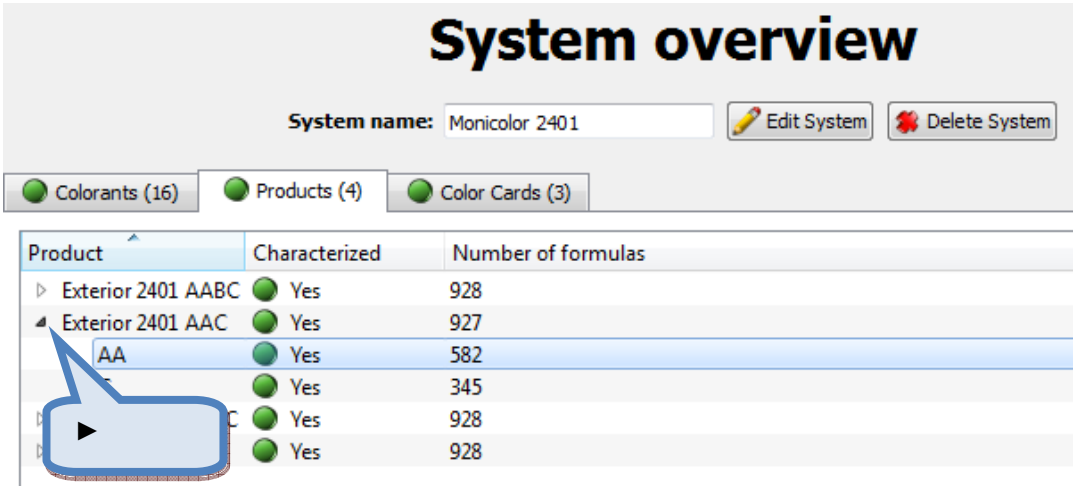
Note: You can also view all items on navigation section on the left hand side of the window. These functions are described on following sections.

Note: You can also see if system configuration is done properly from "traffic lights" in front of each item. The green light is meaning that configuration is ok, and the red light is meaning that some or all the information is missing.

In **Used in formulas** column you can see in how many formulas are in any of the specific colorant or product used. This information is helpful when deciding to delete any of the colorants or products from the system. With this information, you know how many formulations you need to rematch with the other colorants or products.

Colorants, products and color cards in the database can be viewed by clicking on the corresponding tab page headers.

Products window:

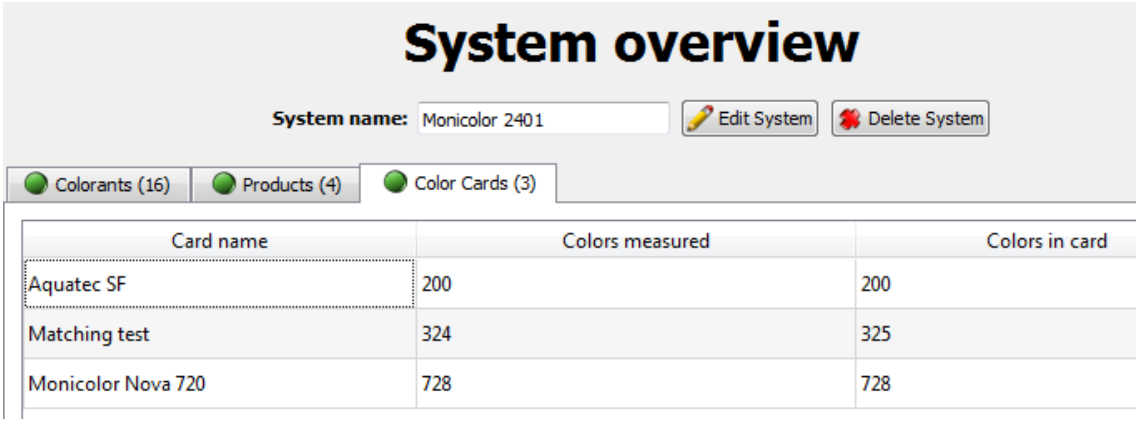


Click on the ►- button to navigate to the lower levels on product hierarchy.

In **Characterized** column Green Traffic lights symbol indicates if item is characterized into the database.

In **Number of formulas** column you can see in how many formulas are in any product used. This information is helpful when deciding to delete any colorant or product from system. With this information, you know how many formulations you need to rematch with other colorants or products, in such case.

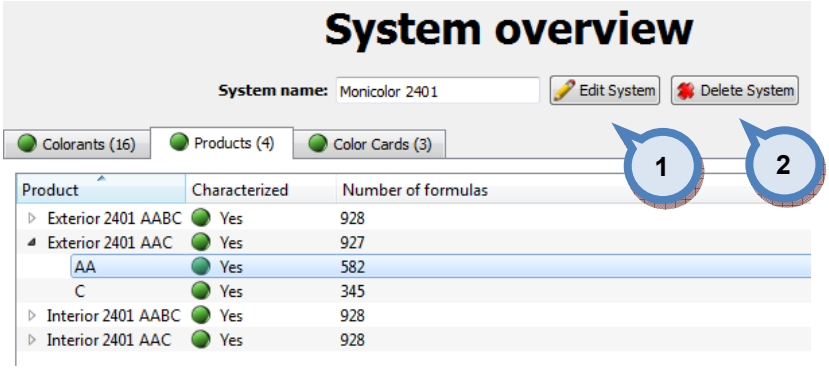
Color cards window:



In **Colors measured** column you can see how many colors are measured in to the color card.

In **Colors in card** column you can see how many color names or color codes are included in the color card.

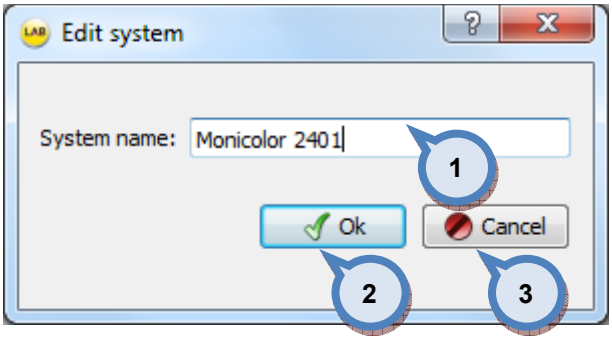
System overview window includes also 2 buttons to **Edit** system name and **Delete** system from the database.



1.Edit System: The button to edit the system name.

2.Delete System: The button to delete the system.

When Edit system button is clicked following window will open up:

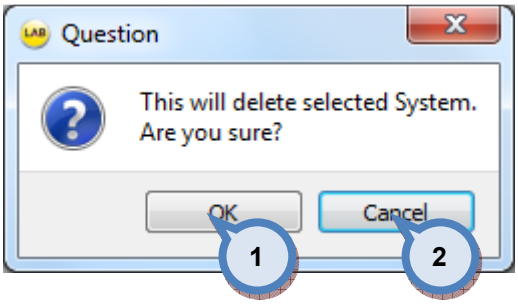


1.System name: The text field for the system name.

2.OK: The button to confirm changes.

3.Cancel: The button to discard the changes.

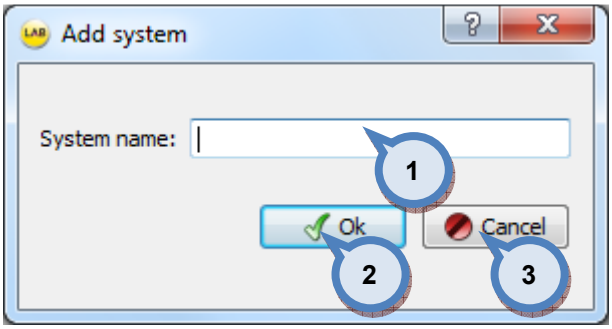
When Delete system button is clicked following window will open up:



1.OK: The button to confirm delete.

2.Cancel: The button to cancel delete.

When selecting **1.<new>** from the system selector drop down list following window opens up:



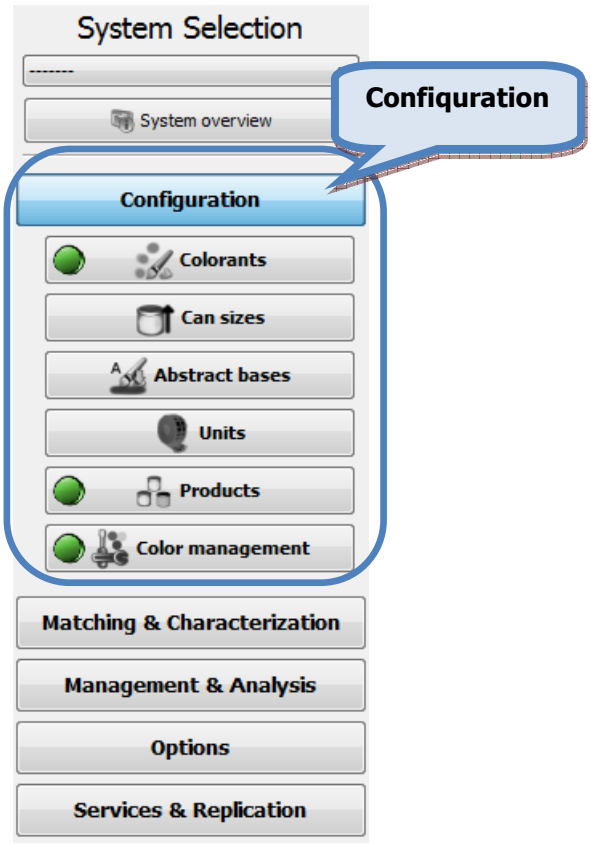
1.System name: The text field to input the name of the new system.

2.Ok: The button to confirm new system creation.

3.Cancel: The button to cancel new system creation.

2 Configuration

To make configuration to the selected system, click the **Configuration** button on the navigation area on the left hand side. Below this level, you find the configuration pages for: colorants, can sizes, abstract bases, units, products, and color management.



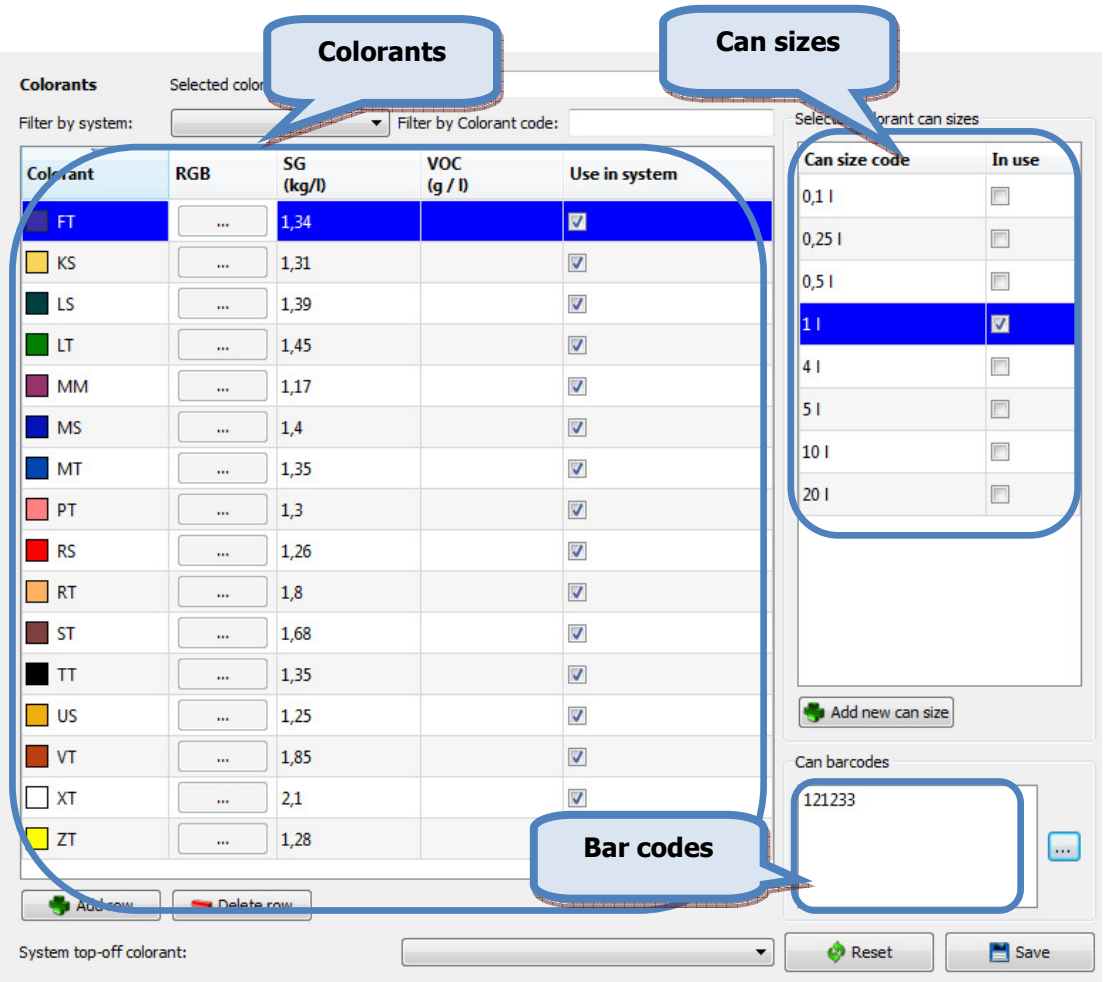
You can see the configuration status for the components with the traffic lights: green meaning characterization done. Traffic lights are not in use when viewing the whole database i.e system selection as None.

2.1 Colorants

To make colorant configuration, navigate into the **Configuration ⇨ Colorants** page.

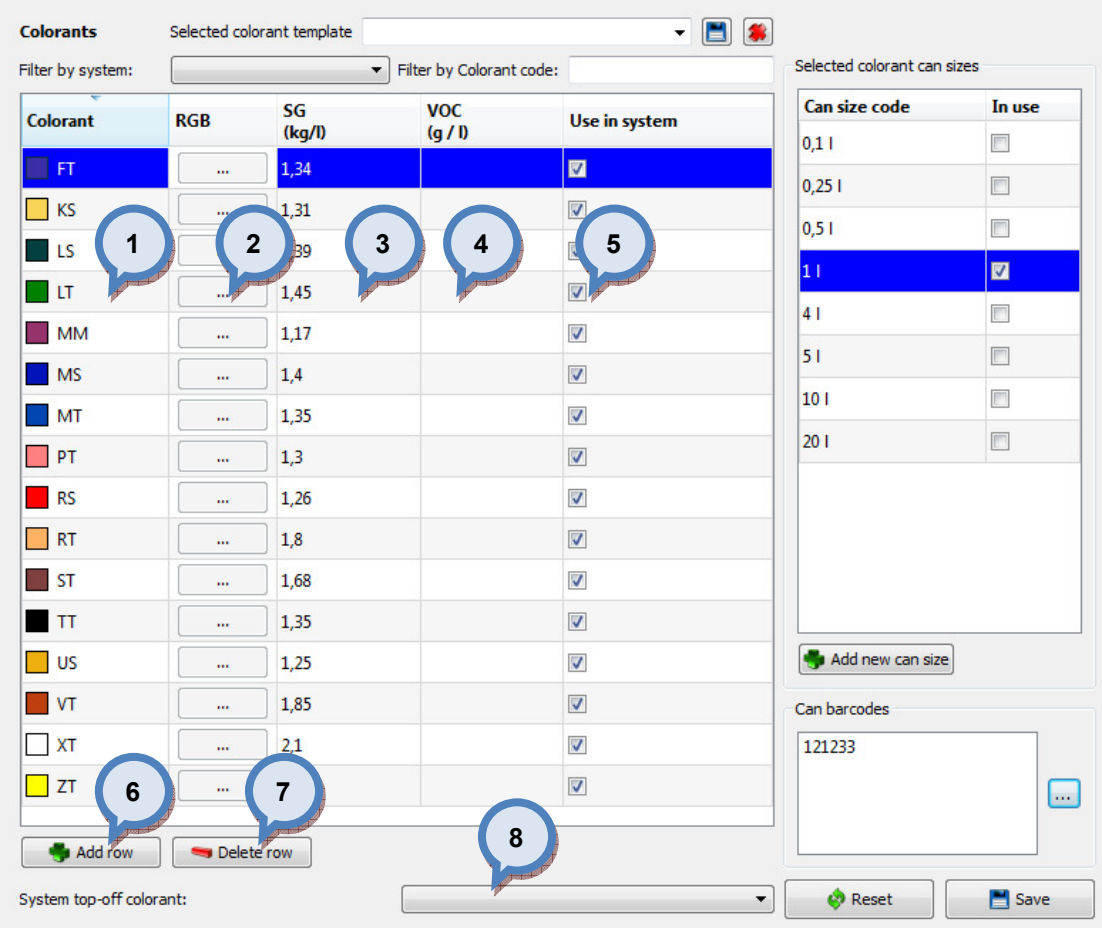
In colorants page you can:

- Create new colorants linked with different can sizes and bar codes
- Edit and delete existing colorants



With barcodes you can control canister filling when colorant cans are bar coded.

On the **Colorants** section you have the following items:



1.Colorant: The colorant name or code.

2.RGB: The color to be displayed on the screen.

3.SG: The specific gravity of the colorant. Unit of measure is kg/litre.

4.VOC: The amount of solvents in the colorant. Unit of measure is g/litre.

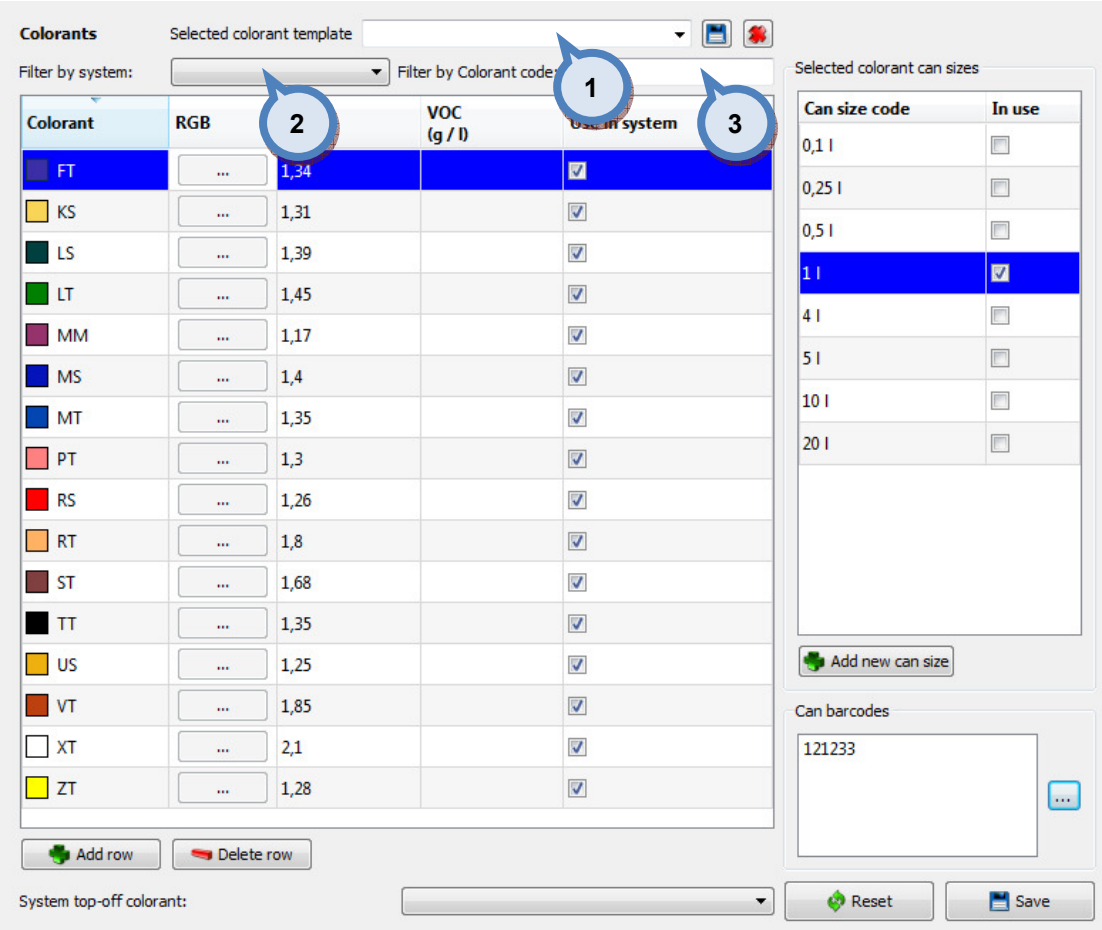
5.Use in system: When the check box is enabled, the colorant is included in to the selected system.

6.Add row: The button to add a new colorant, i.e. empty road.

7.Delete row: The button to delete a selected colorant, i.e. selected row.

8.System top-off colorant: The dropdown list to select Top-off colorant to be used with formulas if top-off is required by the selected product.

On the **upper part** of the **Colorants** window, you have the following template and sorting options:

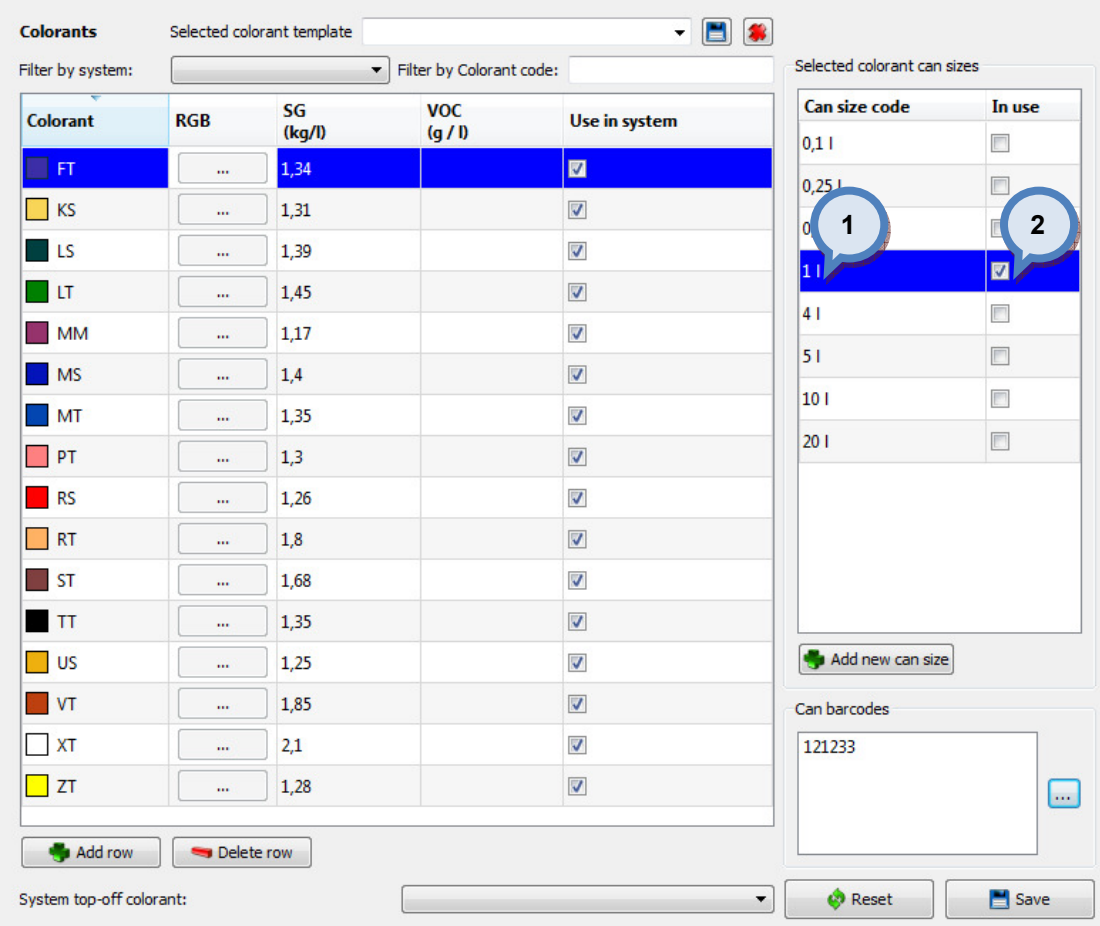


1.Selected colorant template: The drop down field to select a template. Use button to save a new template and button to delete a selected template.

2.Filter by system: The text field to search by the system name or the code, or the part of one..

3.Filter by Colorant code: The text field to search by the colorant name or the code, or the part of one.

On the **Can sizes** section you have following items:

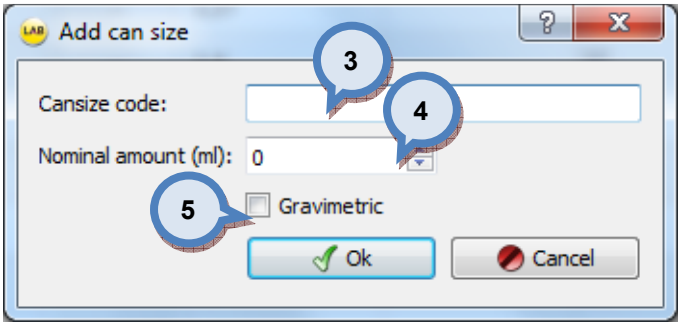


1.Can size code: The code for the can size.

2.In use: When the check box is enabled the can size is used for the selected system.

3.Add new can size: The button to create a new can size for the system.

When **Add can size** button is clicked, following window will open up:



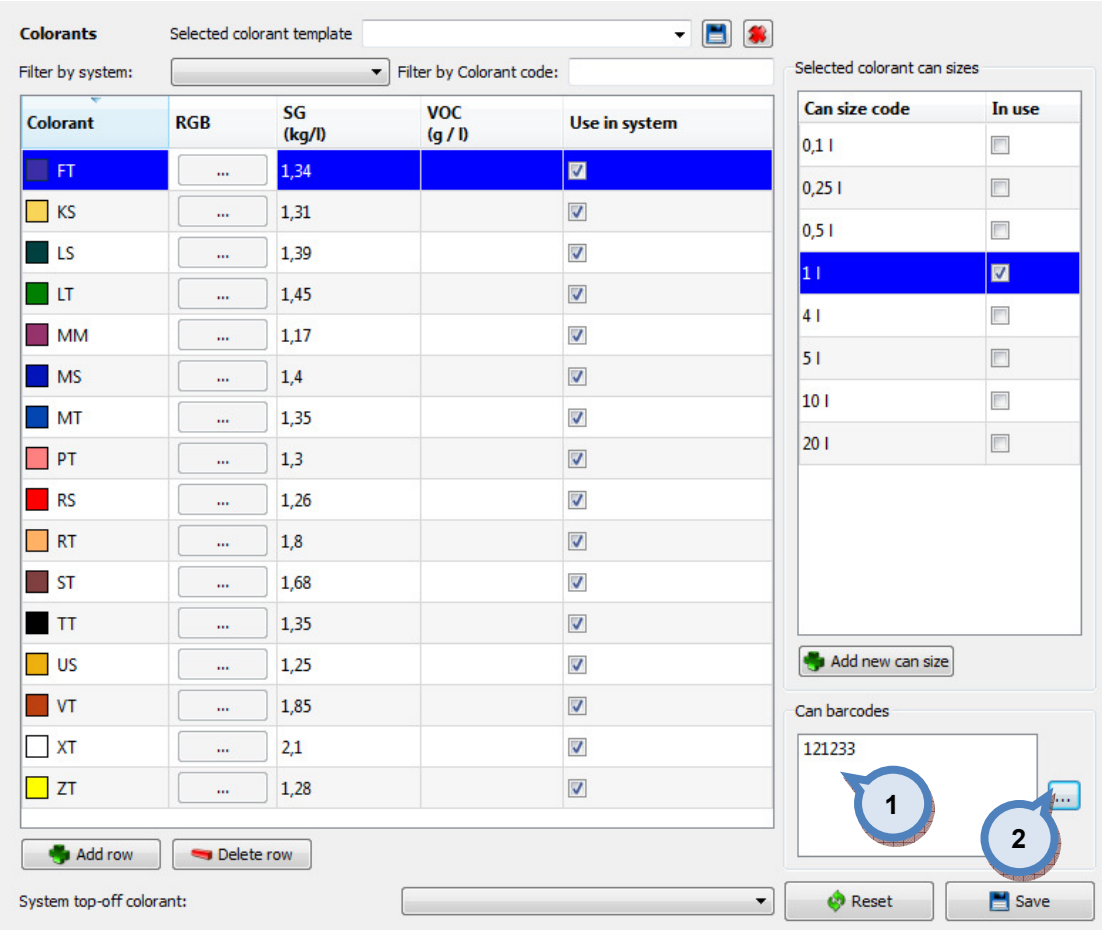
3.Can size code: The code for the can size.

4.Nominal amount: The total volume of the can. The unit of measure is millilitres.

5.Gravimetric: When the check box is enabled the can size is treated as gravimetric, instead of volumetric.

When a can size is selected from the can size list, bar code(s) related this can size are displayed on Can barcodes section, if bar codes are created for selected can size.

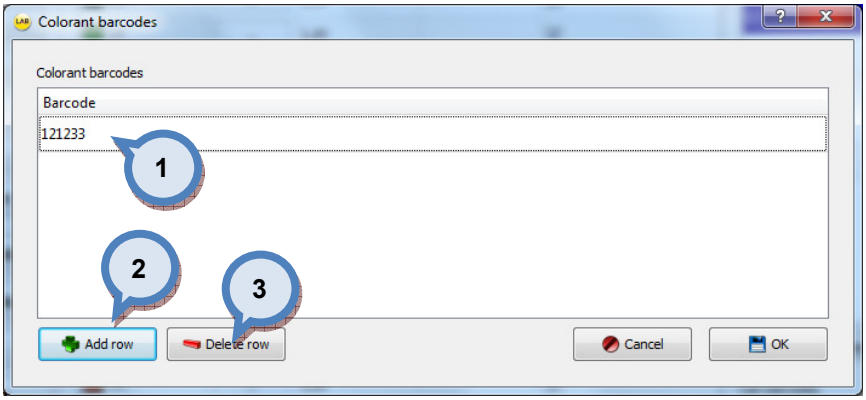
On the **Can barcodes** section you have following items available:



1.The bar code: The list of already created bar codes for the selected can size.

2. : The button to create or modify the bar codes for the selected can size.

When the can size is selected from the list and the button is clicked, following window will open up:



1.The bar code: The list of already created bar codes for selected can size.

2.Add row: The button to create a new bar code i.e. add new row to the list.

3.Delete row: The button to delete selected bar code, i.e. delete a selected row.

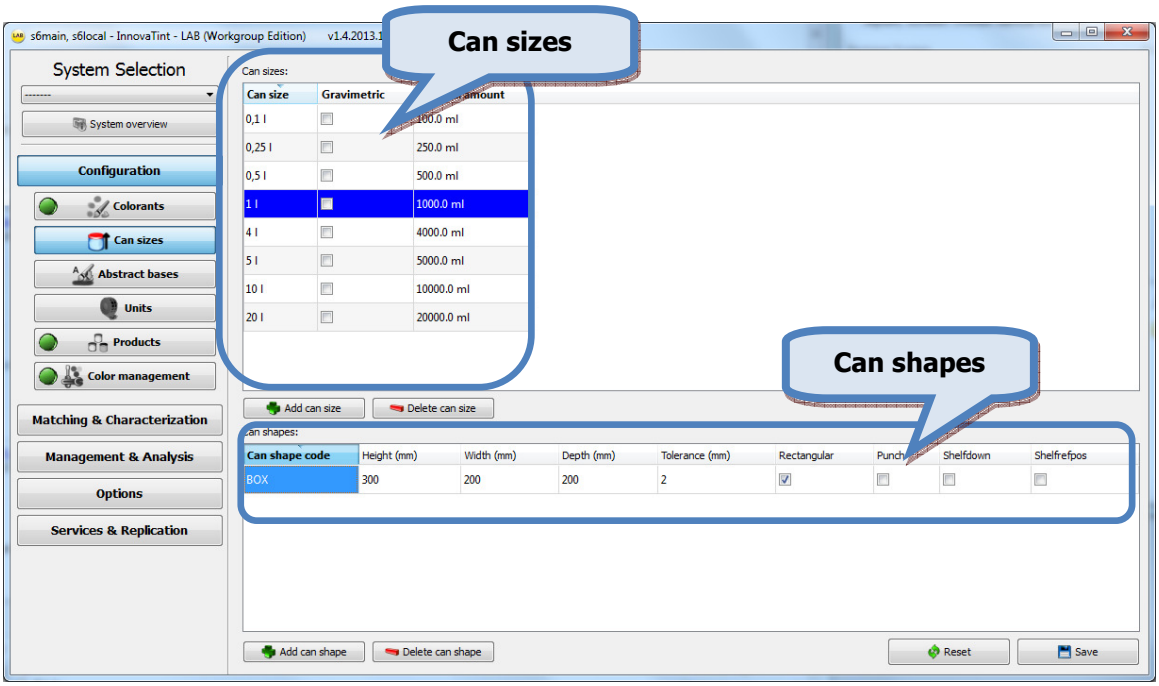
2.2 Can sizes

To make can size configuration, navigate into the **Configuration ⇨ Can sizes** page.

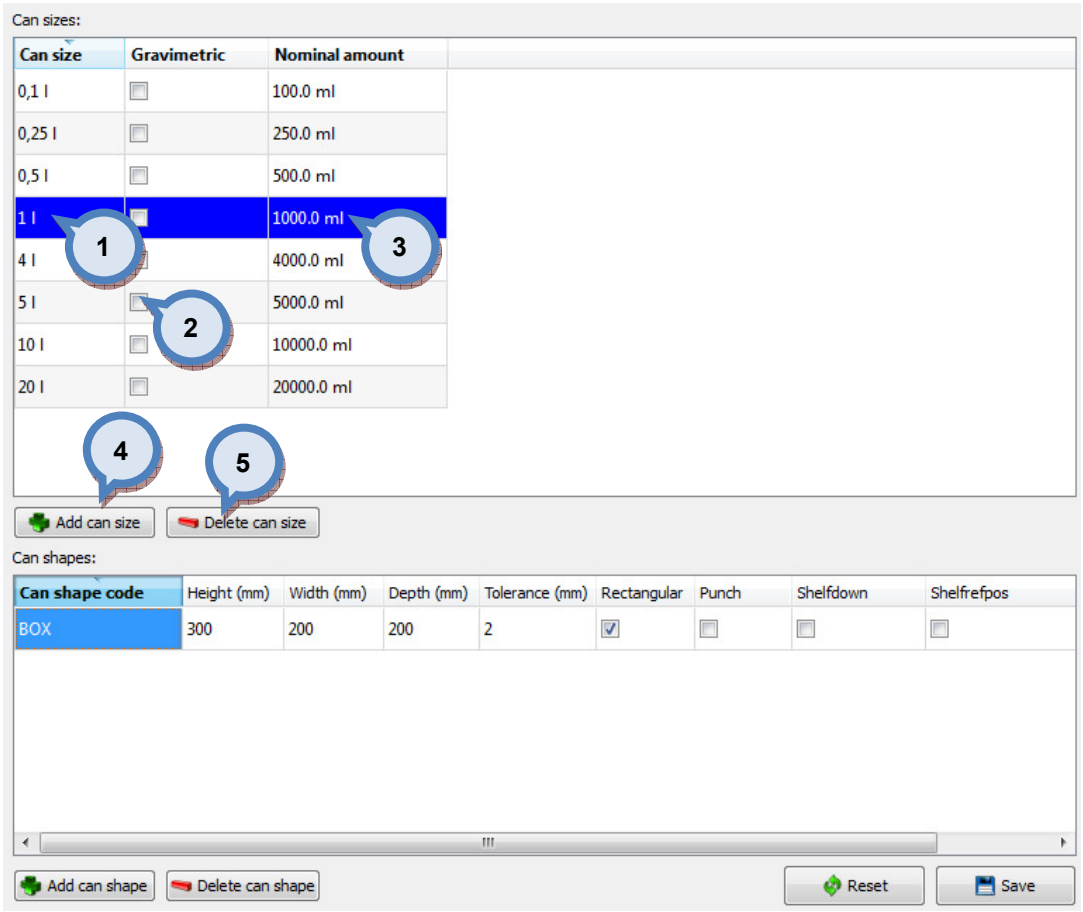
In can sizes page you can:

- Create new can sizes with can shape information
- Edit and delete existing can sizes and can shapes
- Edit and delete bar code information for can sizes

Can shape feature is optional and is only used when compatible tinting machine or shaker is connected in to this software. Can sizes created in Can sizes page are visible on both Colorant and Products pages.



On the **Can size** section **of the Can sizes** window, the following items are available:



1.Can size code: The code for the can size.

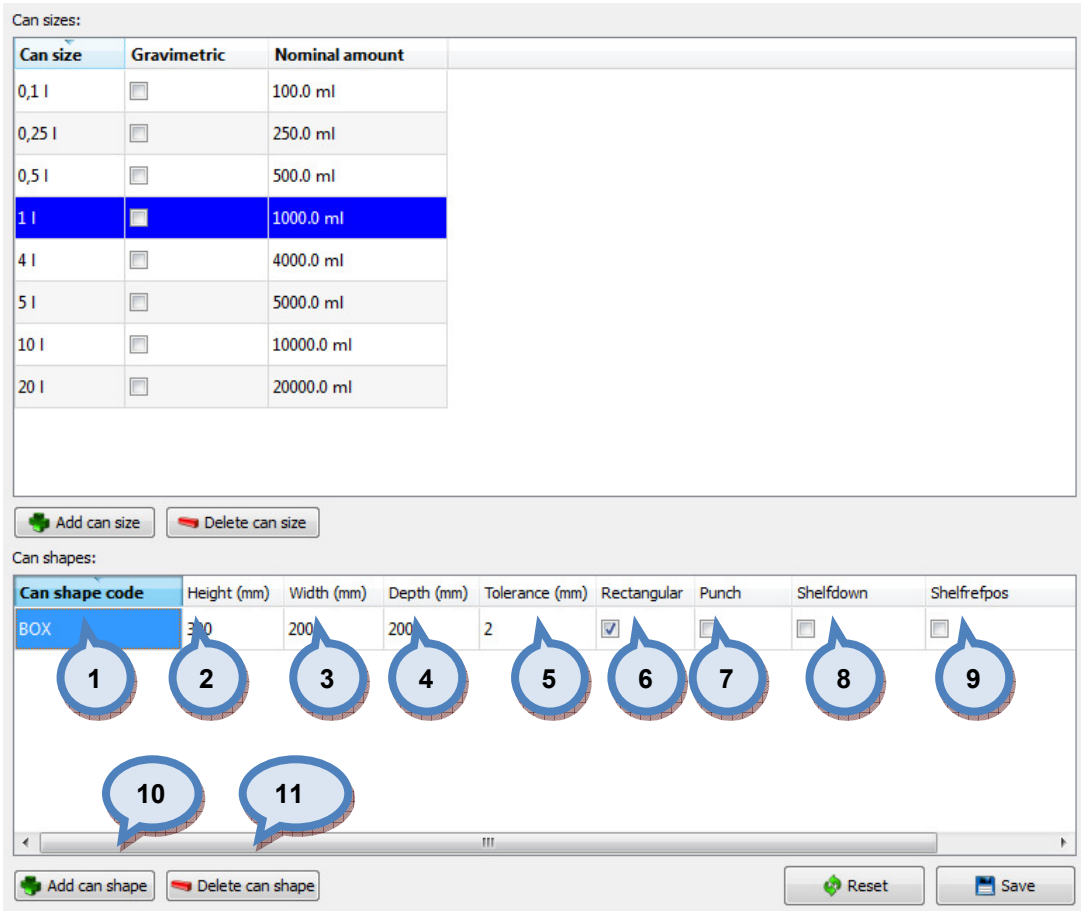
2.Gravimetric: When the check box is enabled the can size is treated as gravimetric instead of volumetric.

3.Nominal amount: Total volume of the can size. Unit of measure is millilitres.

4.Add new can size: The button to create a new can size for the system.

5.Delete can size: The button to remove selected can size from the system.

On the **Can shape** section of the **Can sizes** window, the following items are available:



1.Can shape code: The code for the can shape.

2.Height: The height of the can.

3.Width: The width of the can.

4.Depth: The depth of the can.

5.Tolerance: The tolerance of measures.

6.Rectangular: When check box is enabled can shape is like a box.

7.Punch: When check box is enabled automatic punch is used.

8.Shelfdown: When check box is enabled automatic shelf down procedure is activated.

9.Shelf refpos: When check box is enabled automatic shelf reference position procedure is activated.

10.Add can shape: The button to create new can shape.

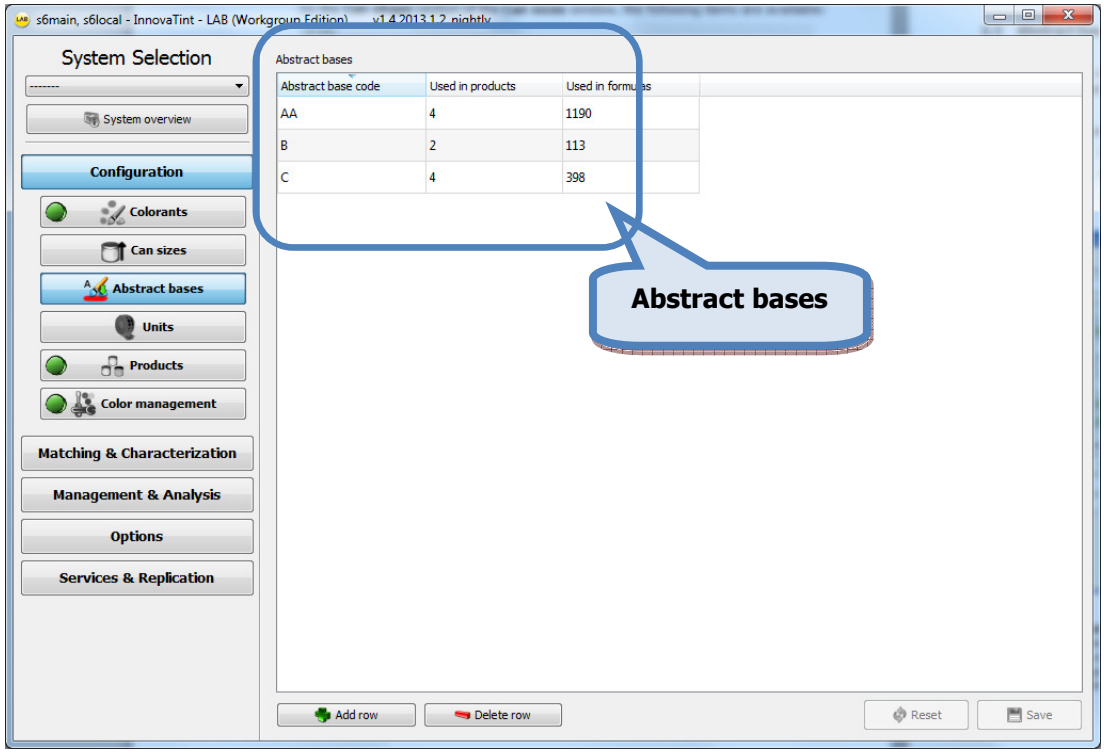
11.Delete can shape: The button to delete selected can shape.

2.3 Abstract bases

To make abstract base configuration, navigate into the **Configuration** ⇨ **Abstract bases** page.

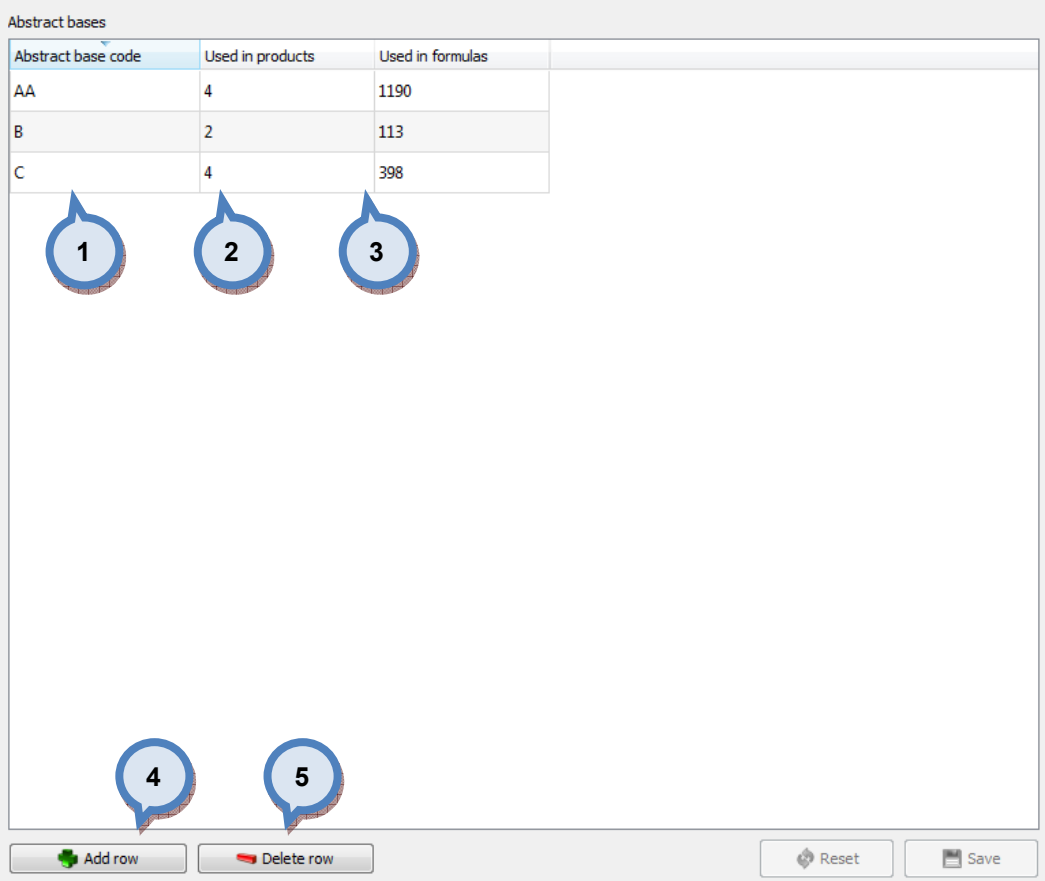
In abstract bases page you can:

- Create and edit abstract base codes
- View in how many products and formulas abstract bases are used



Abstract base: Abstract base is a base code that could be used to describe the base material essence, for example pastel. Innovatint Lab allows all products which uses same abstract base to share information; formulas, characterization data. Abstract base can also have multiple degrees of data, for example, each product may have its unique formula base or characterization data.

On the **Abstract bases** window, you have following items:



1. **Abstract base code:** The code for the abstract base.
2. **Used in products**: The number of products using this abstract base.
3. **Used in formulas**: The number of formulas using this abstract base.
4. **Add row**: The button to create a new abstract base name.
5. **Delete row:** The button to remove selected abstract base name.

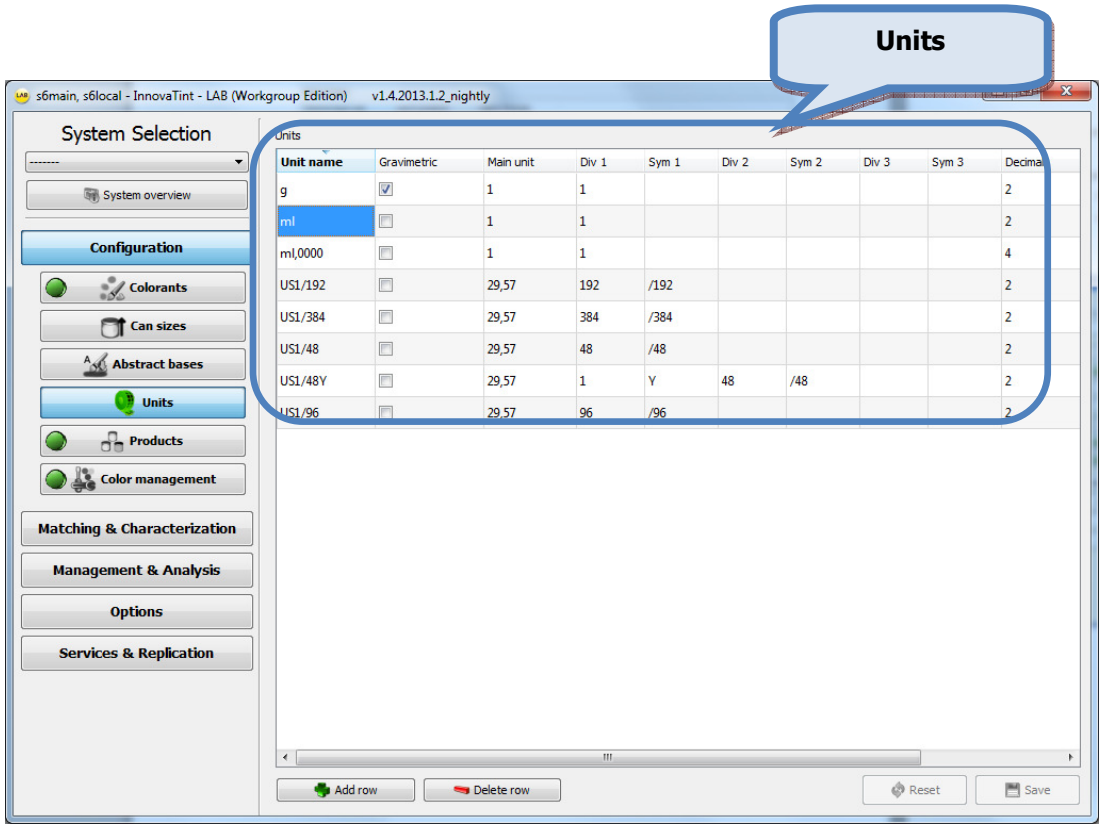
Note: Abstract base cannot be deleted if abstract base is used in any product.

2.4 Units

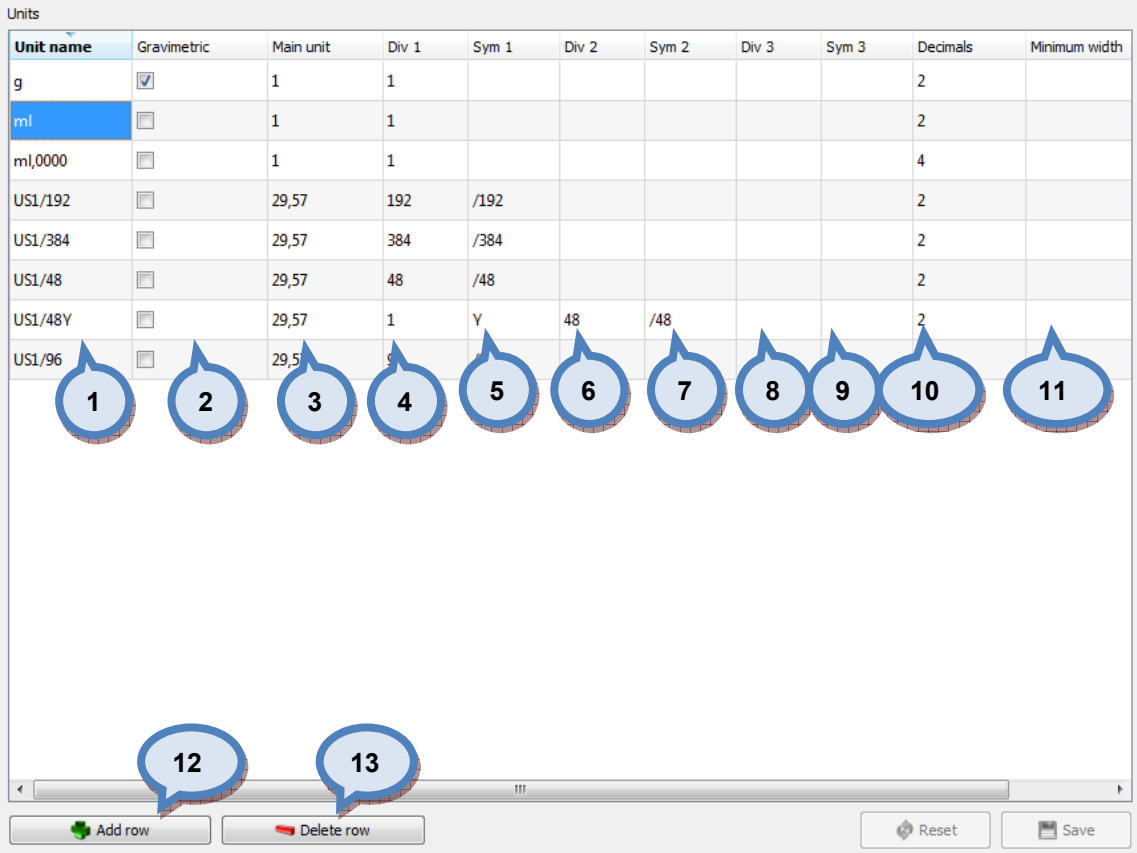
To make unit configuration, navigate into the **Configuration** ⇨ **Units** page.

In units page you can:

- Create new units
- Edit and delete existing units



On the **Units** window, you have following items:



1.Unit name: The name of the unit.

2.Gravimetric: When the check box is enabled, unit is treated as gravimetric unit, instead of volumetric unit.

3.Main unit: The main unit.

4.Div 1: The number used for 1st division.

5.Sym 1: The symbol for 1st division.

6.Div 2: The number used for 2nd division.

7.Sym 2: The symbol for 2nd division.

8.Div 3: The number used for 3rd division.

9.Sym 3: The symbol for 3rd division.

10.Decimals: The number of decimals displayed on the screen.

11.Minimum width: The number of minimum width of the amount of decimals used in export.

12.Add row: The button to add new unit.

13.Delete row: The button to delete a selected unit.

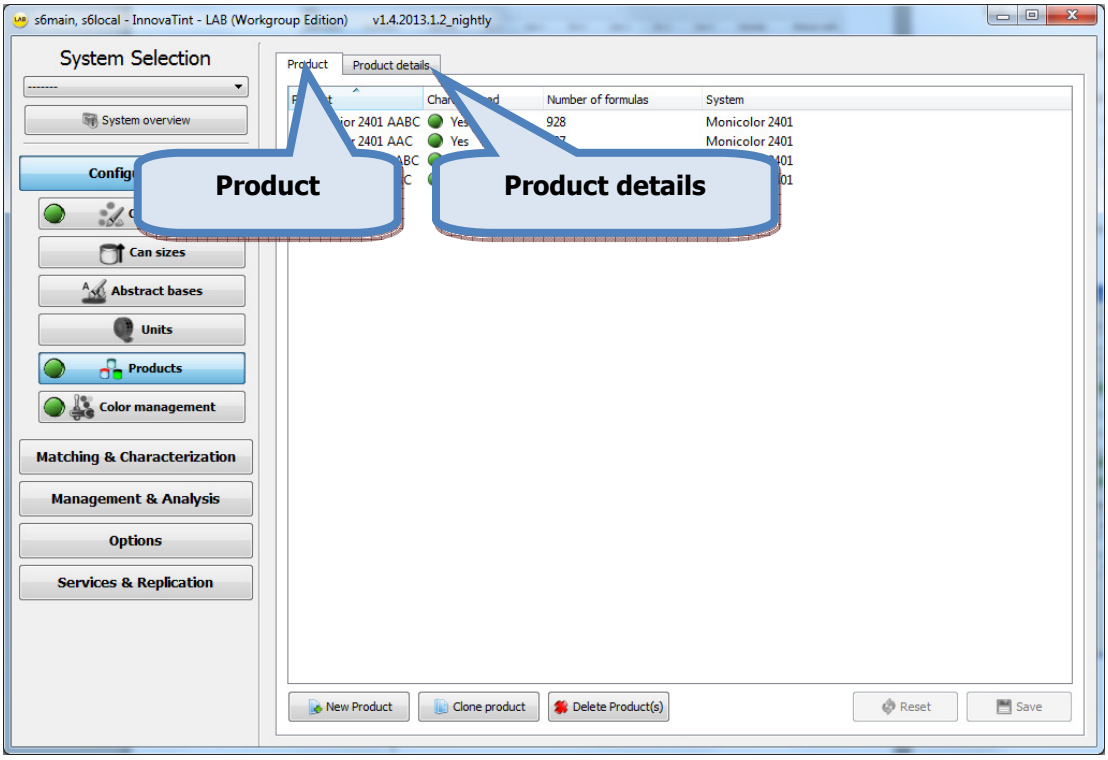
2.5 Products

To make product configuration, navigate into the **Configuration** ⇨**Products** page.

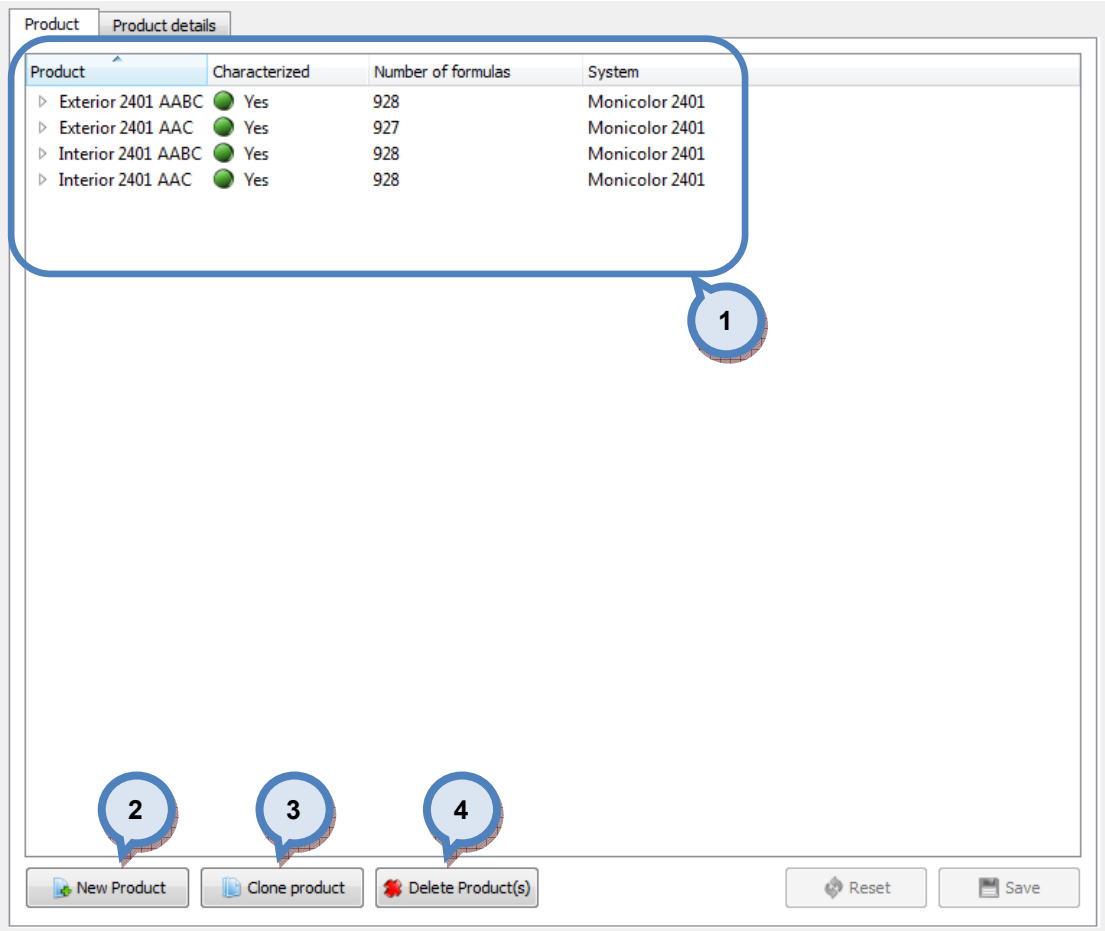
In products page you can:

- Create and edit products
- Create and delete base paints into the products, with can sizes and bar codes
- Set product properties, like: VOC-limit, over fill and primer product
- Set base paint properties, like: specific gravity, VOC, and max fill

The products page has 2 sub pages: Product and Product details.



In the **Product** tab page of the **Products** window, you have following items:



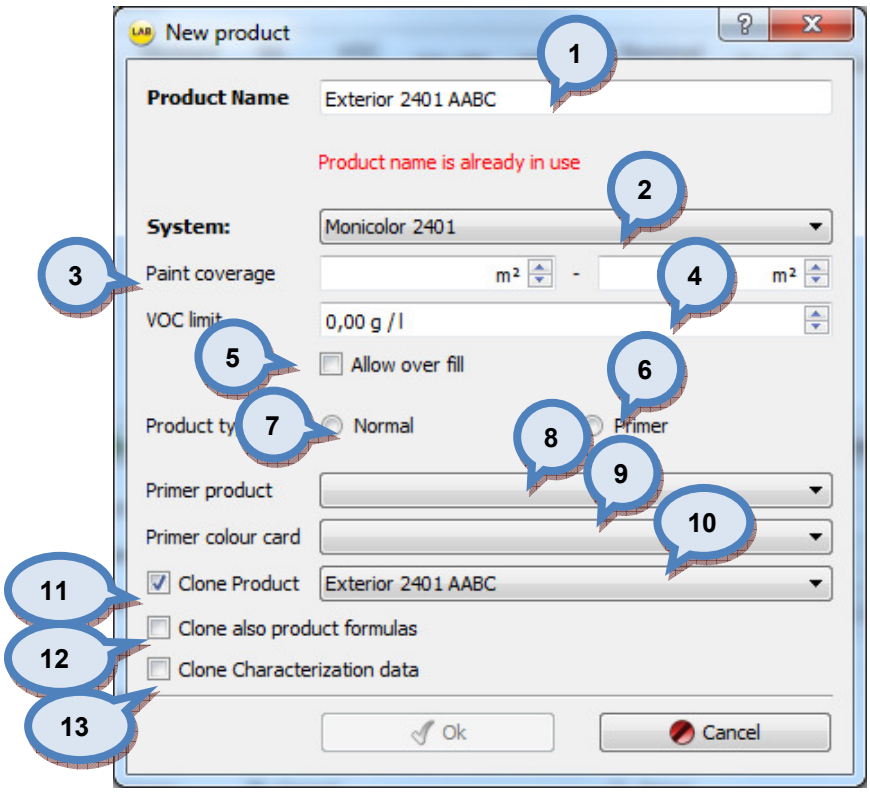
1.The product list with characterization indicator (Yes/No), number of formulas for each product, and system name.

2.New Product: The button to create a new product. See details on this function on following pages.

3.**Clone product**: The button to copy the details of an existing product into a new product.

4.Delete Product(s): The button to delete a selected product or products.

When the **New Product or Clone Product** buttons are clicked, following window opens up:



1.Product Name: The name of the product (the product name must be unique).

2.System: The system name or code, selected from the dropdown list.

3.Paint coverage: The lower and the upper limit for the paint coverage. The unit of the measure is litre/m2.

4.VOC limit: The value for the VOC limit. The unit of the measure is grams/litre.

5.Over fill: The check box to determine if the total amount of paint and colorant can exceed the nominal amount of the paint can.

6.Product type normal: Radio button to set the product as the normal product.

7.Product type primer: Radio button to set the product as the primer product.

8.Primer product: The drop down list to select the primer for this product (optional: only if the primer is needed).

9.Primer colour card: The drop down list to select a color card to be used for the primer. (optional: only if the primer is needed).

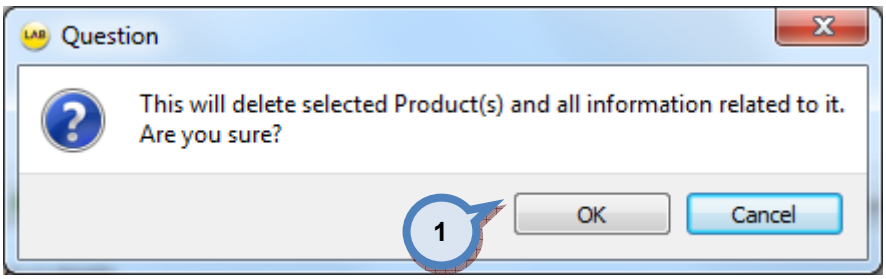
10.Clone product: The check box to copy the product details of an existing product into a new product. Use the drop down list on the right to select a product to copy from.

11. When the **Clone product** check box is enabled, two further options are available:

12.Clone also product formulas: When the check box is enabled, also the formulas are copied.

13.Clone Characterization data: When the check box is enabled, also the characterization data is copied.

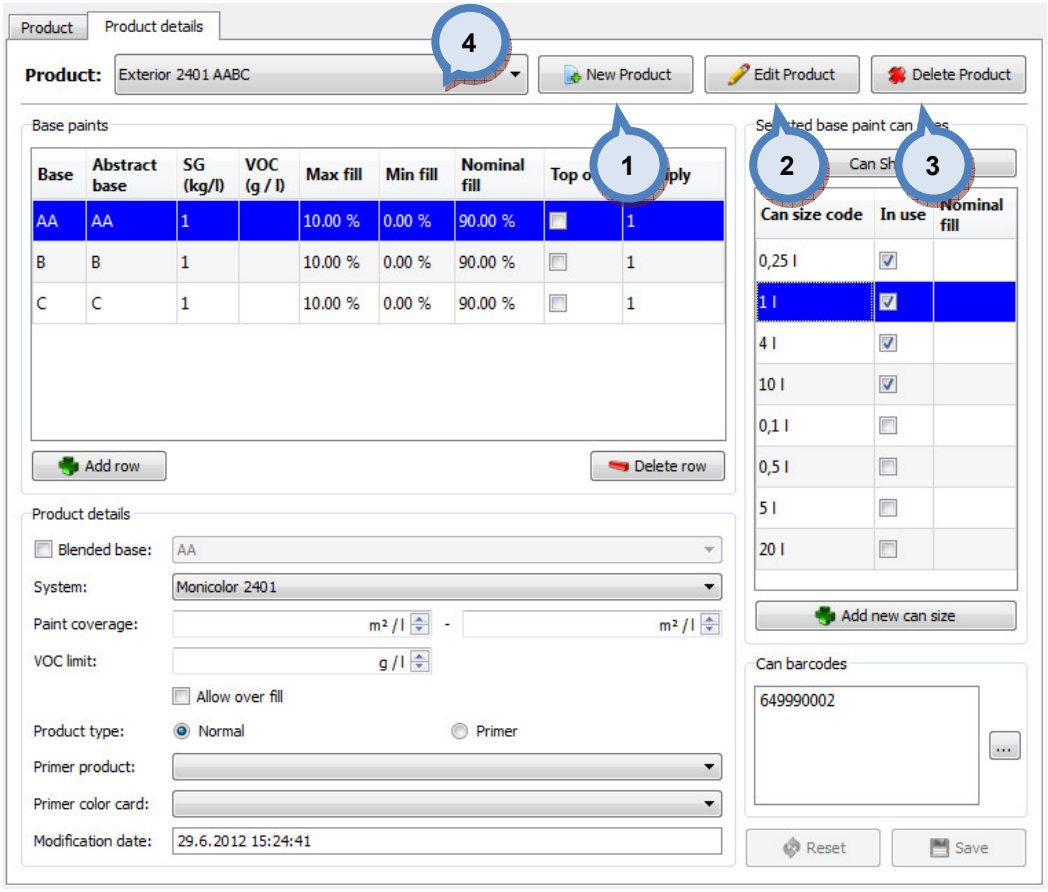
When the **Delete product(s)** button is clicked, following window opens up:



1.OK: Confirm the delete of the product.

Note: When the product is deleted, all product related information is also deleted.

In the upper section of the **Products** window > **Product details** tab page, you have following options available:

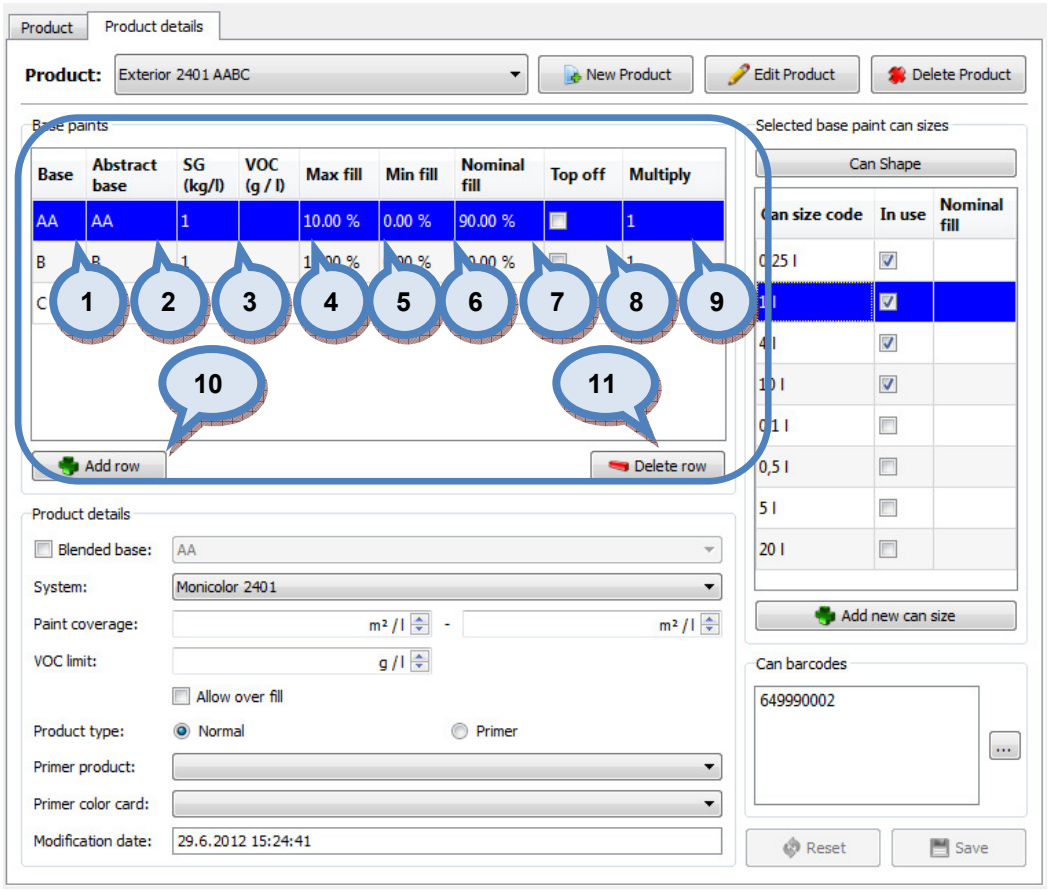


1.New Product: The button to create a new product. See the new product window on the previous pages.

2.Edit Product: The button to edit a selected product. Select product from the drop down list (**4**). Edit product window has the same details as in new product window, see the new product window on the previous pages.

3.Delete Product: The button to delete a selected product. Select product from the drop down list (**4**). See the delete product window on the previous pages.

In the **Base paints** section of the **Products** window > **Product details** tab page, you have following options available:



1.Base: The name or the code of the base paint.

2.Abstract base: The name or code of the abstract base.

3.SG: The specific gravity of the base paint. Unit of measure is kg/litre.

4.VOC 1: The amount of solvents in the base paint. Unit of measure is g/litre

5.Max fill: The number of maximum filling level of the base paint and colorants in the base paint can. Unit of measure is percentage.

6.Min fill: The number of minimum filling level of the base paint and colorants in the base paint can. Unit of measure is percentage.

7.Nominal fill: The number of the filling level of the base paint in the base paint can. Unit of measure is percentage.

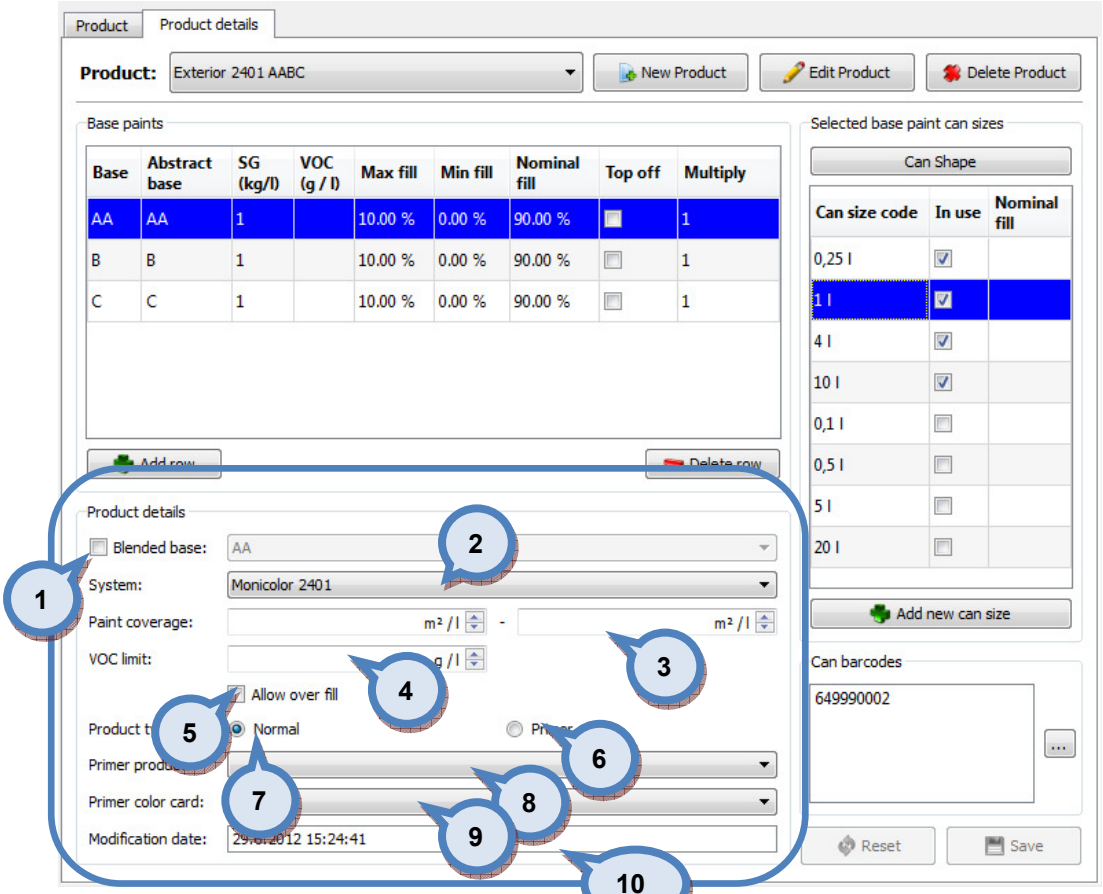
8.Top off: When check box is enabled, top off method is used, i.e. paint can is filled to be 100% full.

9.Multiply: The number used to multiply the base paint amount in the color formula.

10.Add row: The button to add new base paint.

11.Delete row: The button to delete a selected base paint.

In the **Product details** section of the **Products** window > **Product details** tab, you have following options available:



1.Blended base: When the check box is enabled, the product is using blended base method, i.e. mixing clear and white base paint (or colored bases). The blended base code is shown in the dropdown list, right hand side of the check box. Note: Blended base paint should have SG of 1.0.

2.System: The system selector drop down list.

3.Paint coverage: The minimum and maximum area of substrate you are able to apply paint into (with fully opaque paint layer) with 1 litre of the paint. Unit of measure is square metre / litre.

4.VOC limit: The maximum amount of the solvents in the base paint and the colorant mixture. Unit of measure is g/litre.

5.Over fill: When check box is enabled, over fill is enabled

6.Product type normal: Radio button to set the product as the normal product.

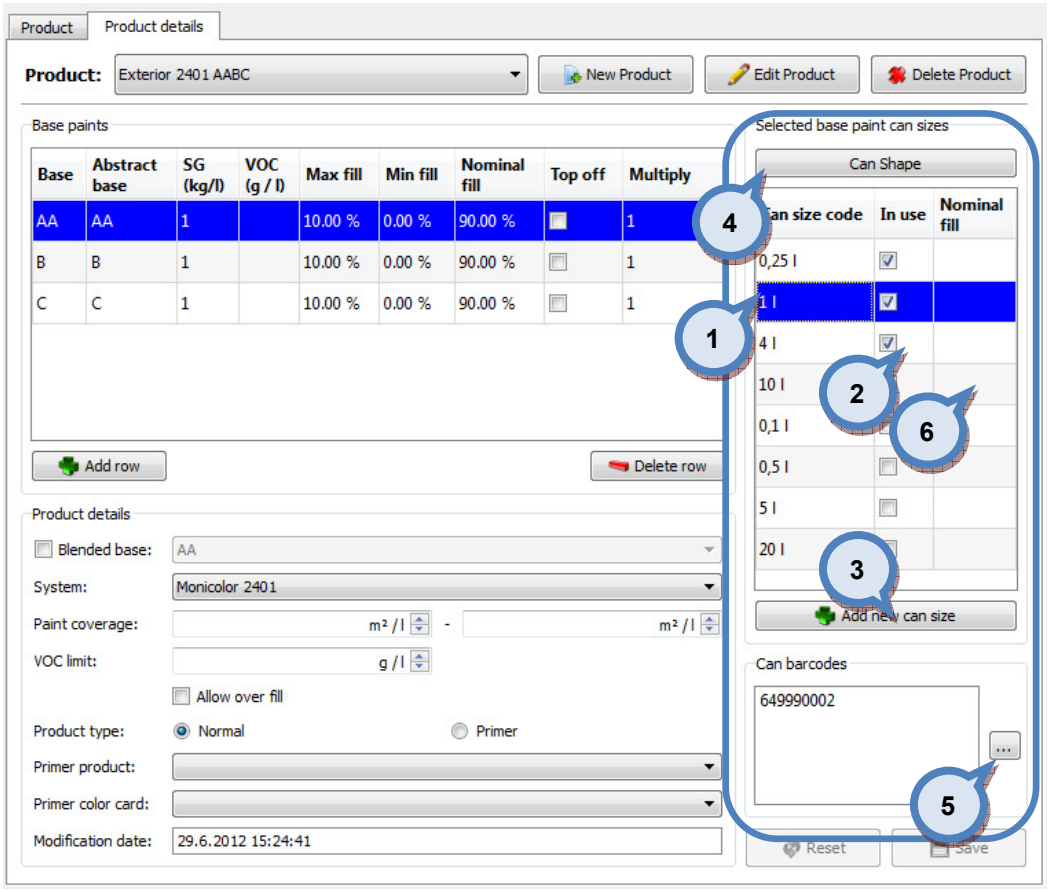
7.Product type primer: Radio button to set the product as the primer product.

8.Primer product: The drop down list to select product to be used as a primer.

9.Primer color card: The drop down list to select color card to be used with a primer.

10.Modification date: The date and time of last modification of product details.

In the **Product details** tab **Selected base paint can sizes** and **Can barcodes** sections of the **Products** window, you have following options available:



1.Can size code: The code for the can size.

2.In use: When the check box is enabled the can size is used for the selected base paint.

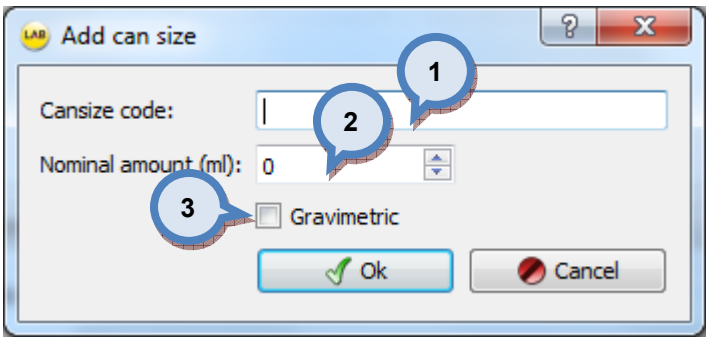
3.Add new can size: The button to create a new can size for the base paints.

4.Can shape: The button to create or modify can shapes for the can sizes.

5. : The button to add or edit a can barcode.

6.Nominal fill: Option to set nominal fill to deviate from the others, that is, the base nominal fill % is used unless set other.

When the **Add new can size** button is clicked, following window opens up:

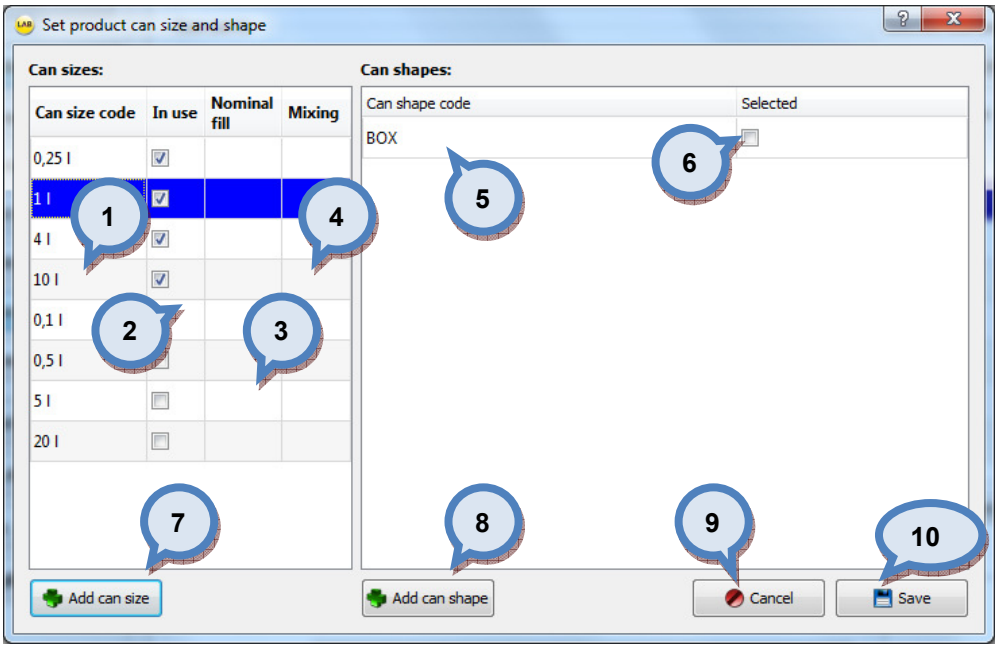


1.Cansize code: The code for the can size.

2.Nominal amount (ml): The total volume of the can. The unit of measure is millilitres.

3.Gravimetric: When check box is enabled the can size is treated as gravimetric, instead of volumetric.

When the **Can shape** button is clicked, following window opens up:



1.Can size code: The name or code for the can size.

2.In use: When the check box is enabled the can size is used for the selected base paint.

3.Nominal fill: Option to set nominal fill to deviate from the others, that is, the base nominal fill % is used unless set other.

4.Mixing: The number of cycles used in mixing machine or shaker to mix the paint can after tinting.

5.Can shape code: The code or name for the can shape.

6.Selected: When check box is enabled this can shape is used for selected can size.

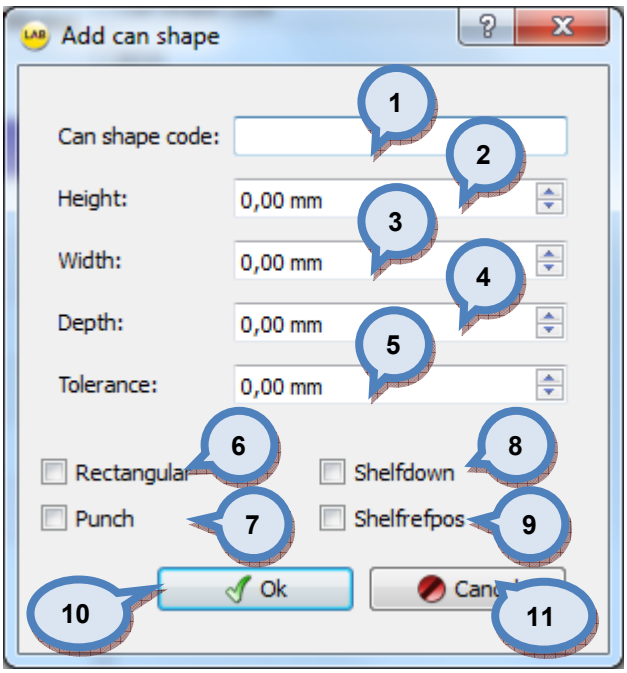
7.Add can size: The button to add new can size.

8.Add can shape: The button to add new can shape.

9.Cancel: The button to cancel all changes made.

10.Save: The button to save changes

When the **Add can shape** button is clicked, following window opens up:



1.Can shape code: The name or code for the can shape.

2.Height: The height of the can.

3.Width: The width of the can.

4.Depth: The depth of the can.

5.Tolerance: The tolerance of measures.

6.Rectangular: When check box is enabled can shape is like a box.

7.Punch: When check box is enabled automatic punch is used.

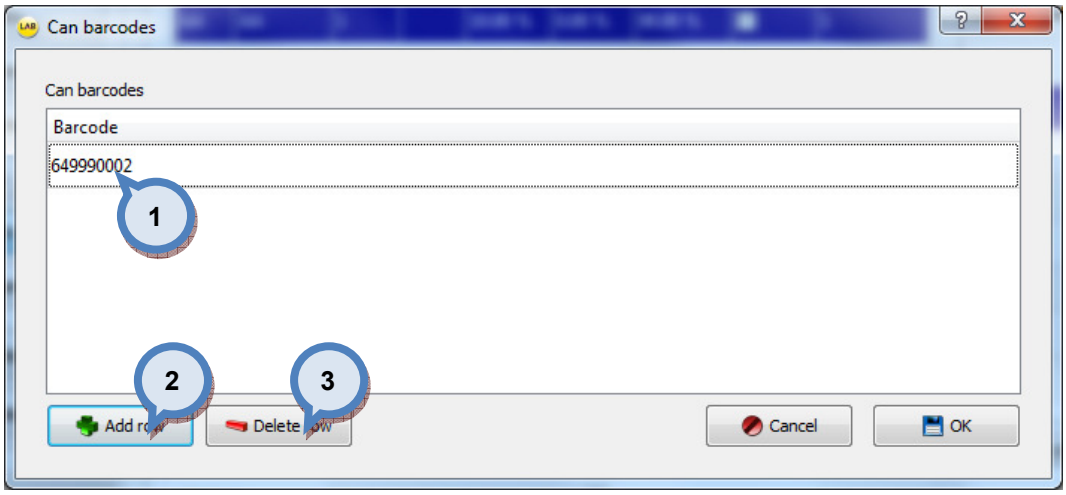
8.Shelfdown: When check box is enabled automatic shelf down procedure is activated.

9.Shelf refpos: When check box is enabled automatic shelf reference position procedure is activated.

10.OK: The button to save new can shape information.

11.Cancel: The button to cancel all changes made.

When base paint and can size is selected and the **can bar code** button is clicked, following window opens up:



1.Barcode: The text field for bar code.

2.Add row: The button to add new bar code.

3.Delete row: The button to delete selected bar code.

2.6 Color management

To manage colors and color cards, navigate into the **Configuration ⇨ Color management** page.

In color management page has four sub pages, where you can:

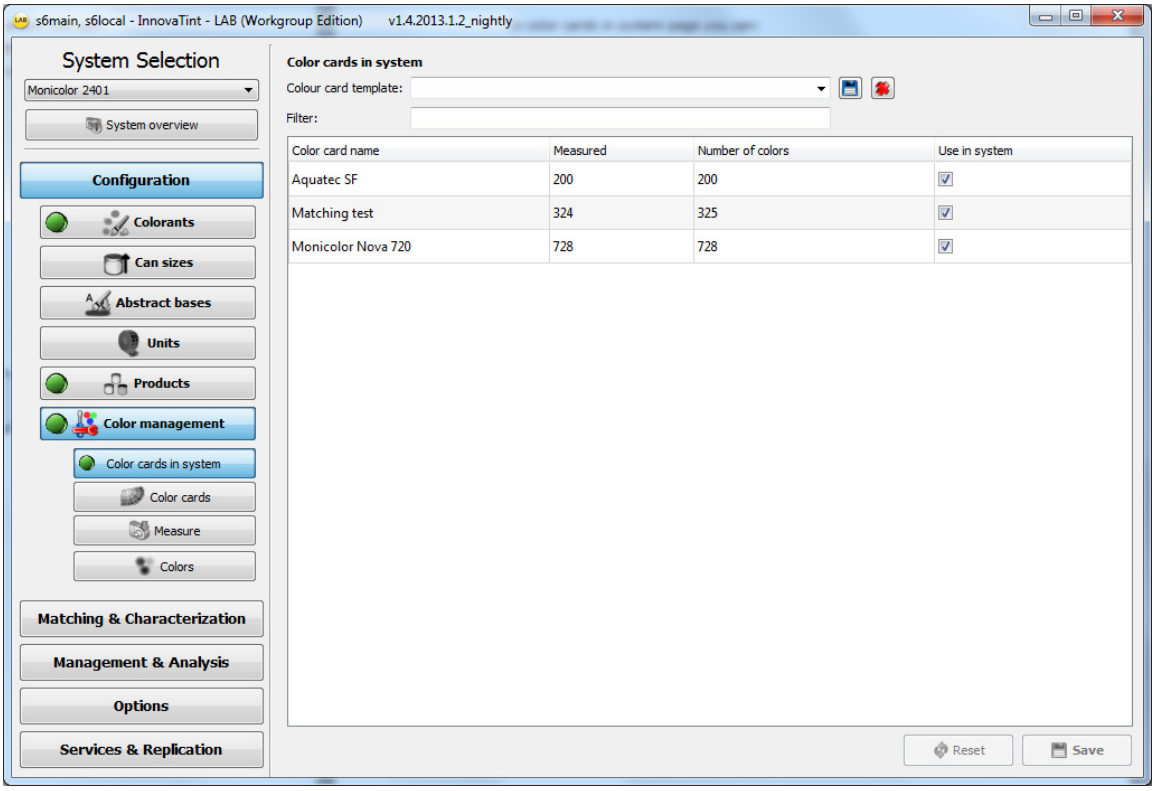
- Create and edit color cards with color codes
- Set color cards to be used in systems (if system selected)
- Measure colors into color cards
- View color information on color cards

2.6.1 Color cards in system

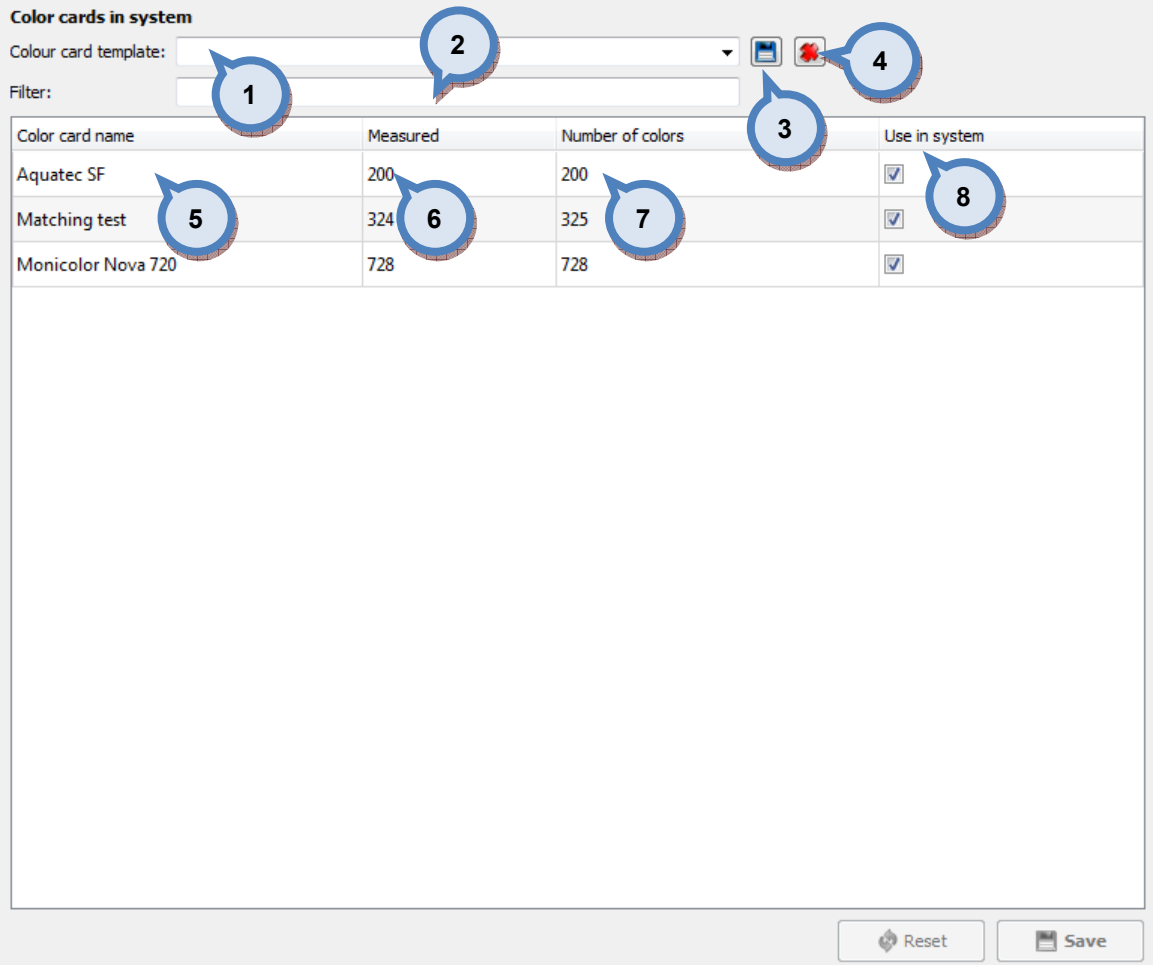
To manage color cards in system, navigate into the **Configuration ⇨ Color management ⇨ Color cards in system** page.

In color cards in system page you can:

- View and set color cards in system.
- Save and use color card templates
- Use filter option to search color cards in system



In the **Color cards in system** window, the following items are available:



1.Color card template: The drop down list for color card template.

2.Filter: The text field to filter color card list below.

3. **:** The button to save color card template.

4. **:** The button to delete color card template.

5.Color card name: The text field to view the color card name.

6.Measured: The text field to view the number of colors measured in this color card.

7.Number of colors: The text field to view the number of colors in this color card.

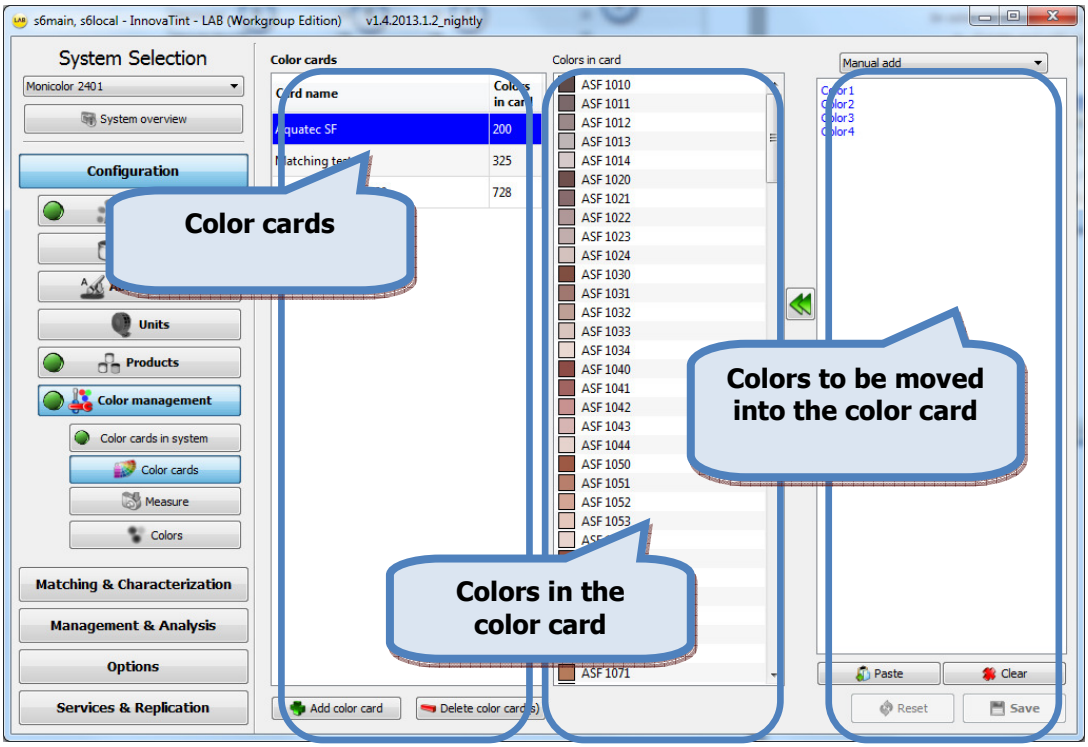
8.In system: When check box is enabled this color card is used in this system.

2.6.2 Color cards

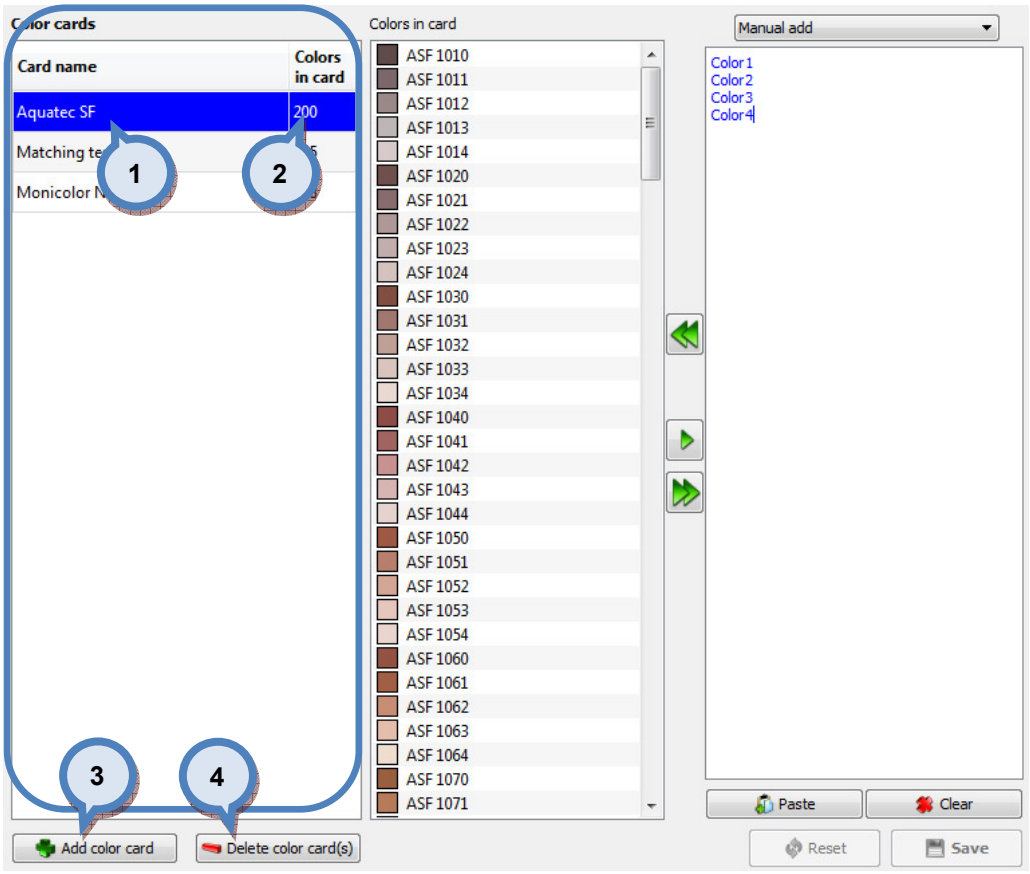
To measure colors, navigate into the **Configuration ⇨ Color management ⇨ Color cards** page.

In color cards page you can:

- Create and edit color card names or codes
- Create and edit color codes in color cards



In the **Color cards** section of the **Color cards in system** window, the items are available:



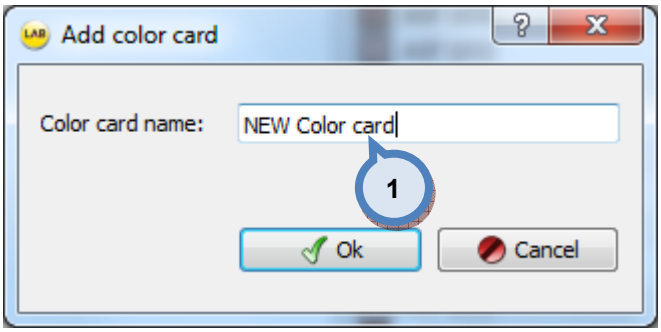
1.Card name: The text field to display the color card name.

2.Colors in card: The text field to display the number of colors in the color card.

3.Add color card: The button to add new color card (name).

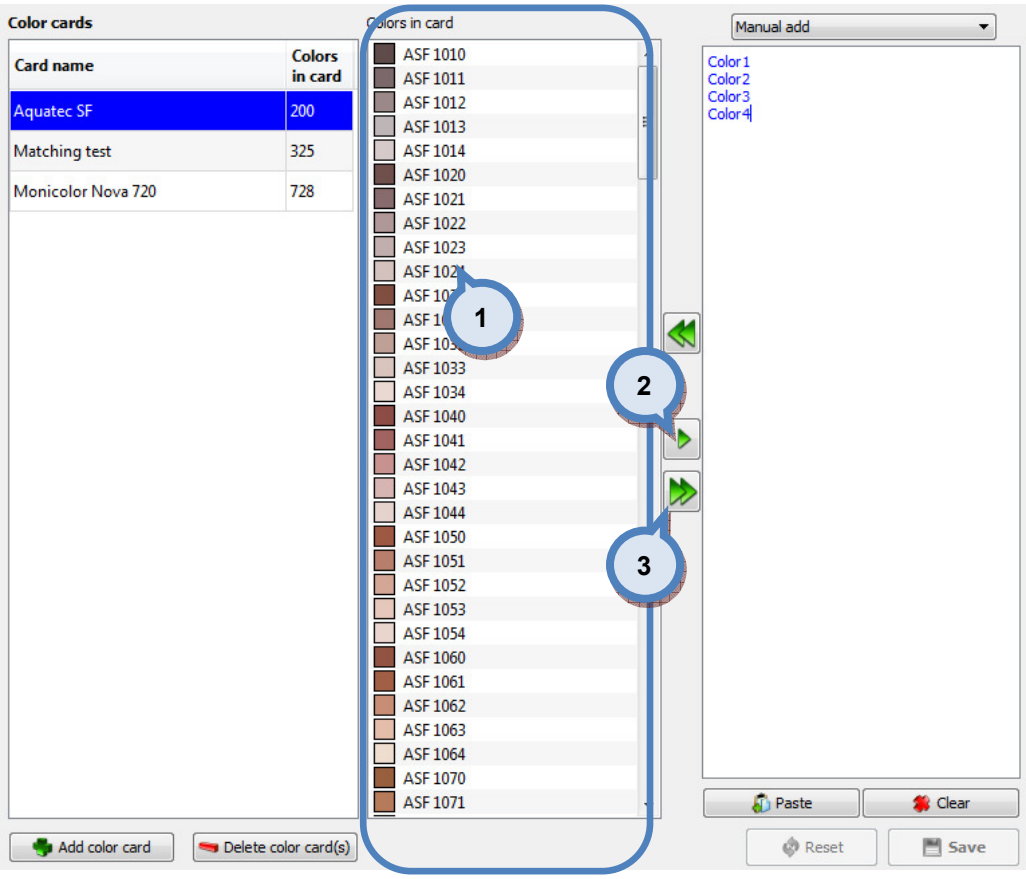
4.Delete color card: The button to delete selected color card.

When the **Add color card** button is clicked, following window opens up:



1.Card name: The text field for the color card name.

In the **Colors in card** section of the **Color cards in system** window, the following items are available:

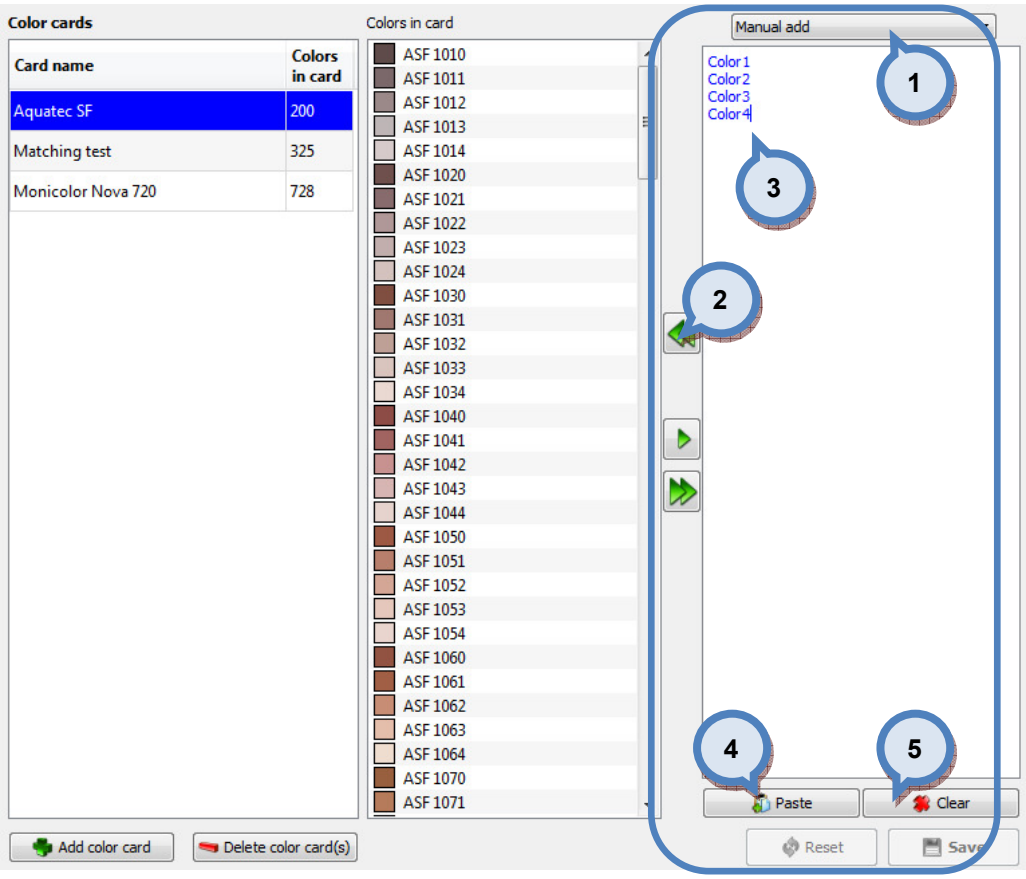


1.The text field to display the color name or code.

2. **:** The button to remove selected color from the color card.

3. **:** The button to remove all colors from the color card.

In the **right hand side** section of the **Color cards in system** window, the following items are available:



1.The drop down list to select which color names or codes are displayed on the text field below this selector. Options are:

-**Manual add:** If selected, you can type with keyboard or paste from the clipboard color codes into the text field below this selector.

-**All existing:** If selected, all existing color names or codes are listed on the text field below this selector.

-**Not in color card(s):** If selected, all existing color names or codes which are not included on any of the color cards in the database are listed on the text field below this selector.

-"Color card name(s)": If selected, all color names or codes in selected color card are listed on the text field below this selector.

2. **:** The button to copy all color names or codes listed on text field (3) in to the selected color card.

3.: The text field to display all color codes or name inputted by any of the methods mentioned on point 1.

4.Paste: The button to paste color codes or names from the clipboard (point 1. Manual add)

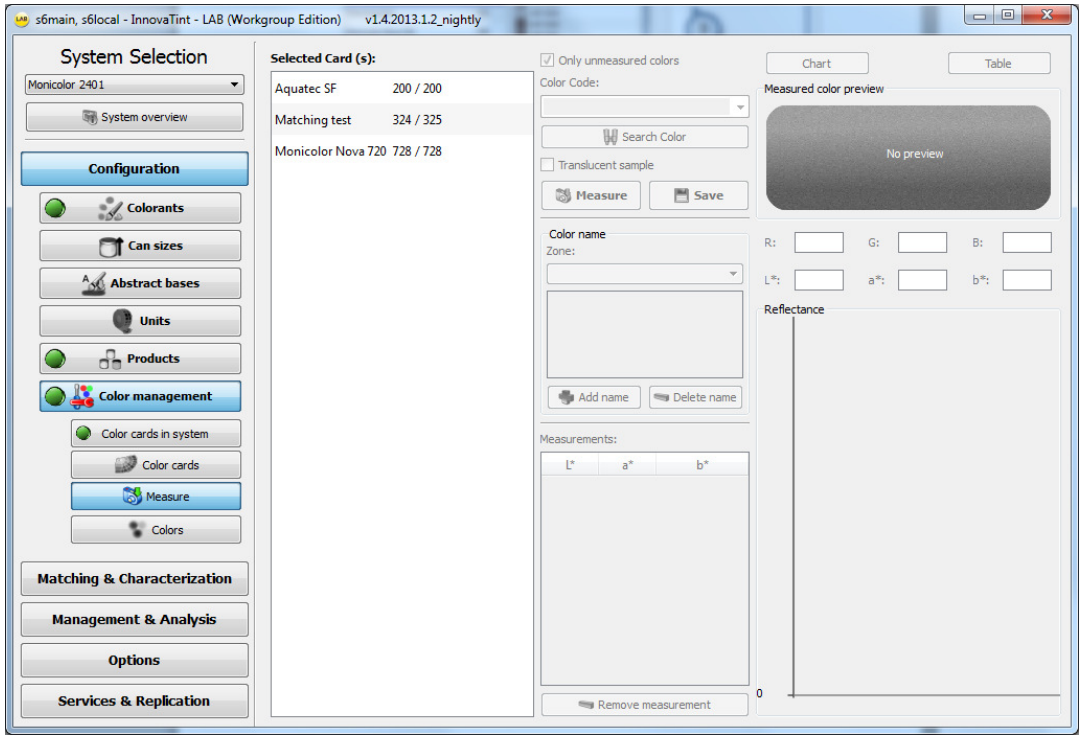
5.Clear: The button to clear text field (3.)

2.6.3 Measure

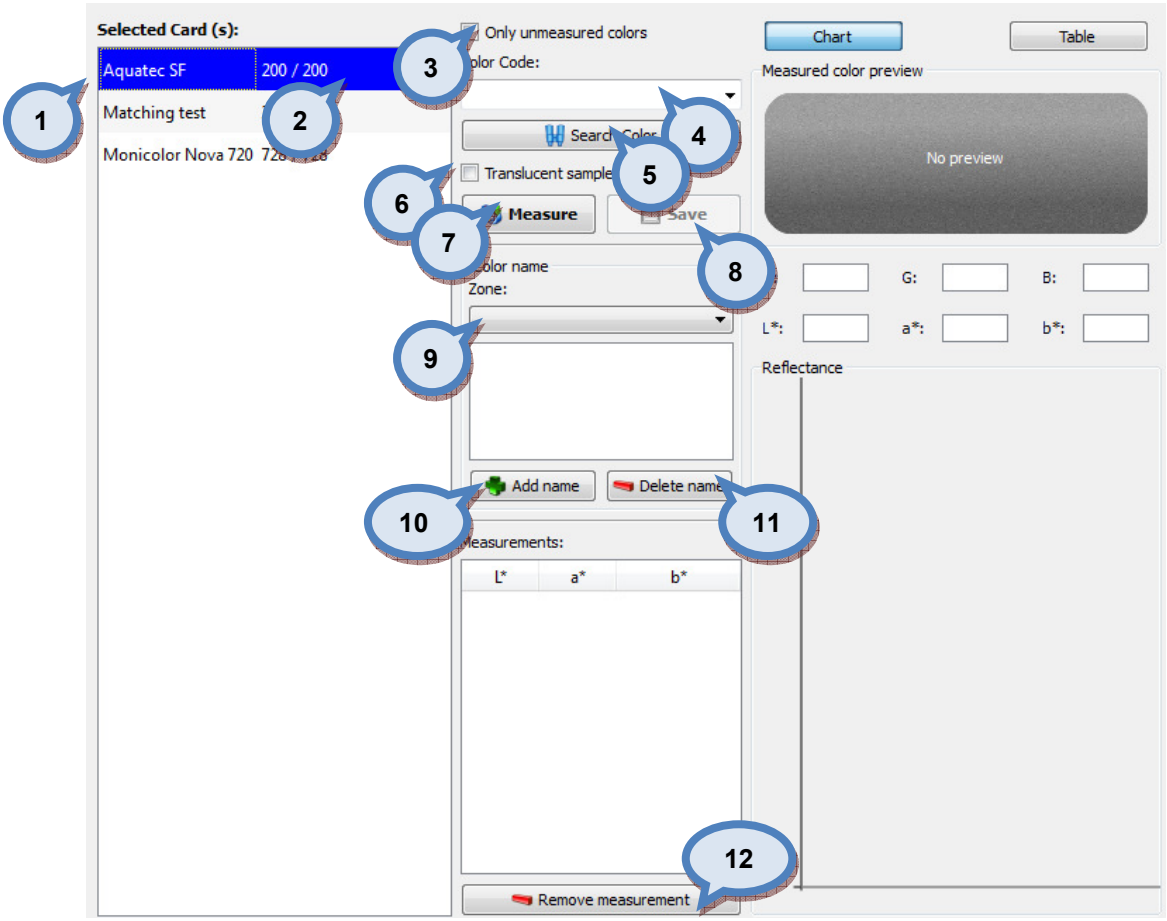
To measure colors, navigate into the **Configuration ⇨ Color management ⇨ Measure** page.

In measure page you can:

- Measure colors in color cards
- View coloristic information of measurements on both visual and numerical format
- Edit color name in zones



In the **Measure** window, the following items are available:



1.Select Card(s): The text list to select color card or multiple color cards.

2.Number of colors/measured colors.

3.Only unmeasured colors: When the check box is enabled only unmeasured colors are shown in color code drop down box.

4.Color Code: The drop down box to select a color code.

5.Search Color: The button to execute search function.

6.Transclucent sample: When this check box is enable, additional measurement options are visible on measurement section. If check box is not enabled measurement is done as fully hiding or opaque sample.

7.Measure: The button to execute the color measurement process.

8.Save: The button to save the measurement data.

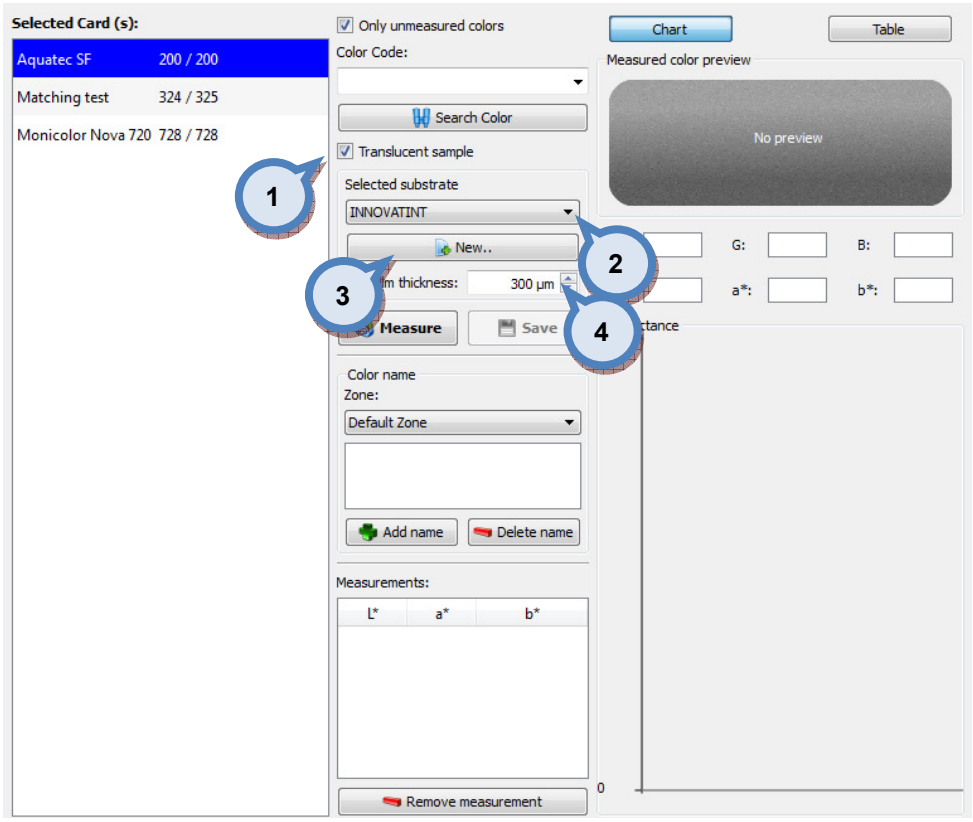
9.Zone: The drop down box to select zone.

10.Add name: The button to add name for the color.

11.Delete name: The button to delete selected color name.

12.Remove measurement: The button to remove the selected measurement.

When the **Translucent sample** check box is enabled, following measurement options are available:



1.Transclucent sample: When this check box is enable, additional measurement options are visible on measurement section. If check box is not enabled measurement is done as with fully hiding or opaque sample.

2.Selected substrate: The drop down box to select substrate.

3.New: The button to create a new substrate.

4.Wet film thickness: The text box to select used film thickness.

When the **New** button is clicked, following window opens up:

1.Substrate code: The text field for a substrate code or name.

2.Measure RB: The button to measure substrate over black background.

3.Delete measurement: The button to delete selected measurement from the field 6.

4.Measure RW: The button to measure substrate over white background.

5.Delete measurement: The button to delete selected measurement from the field 7.

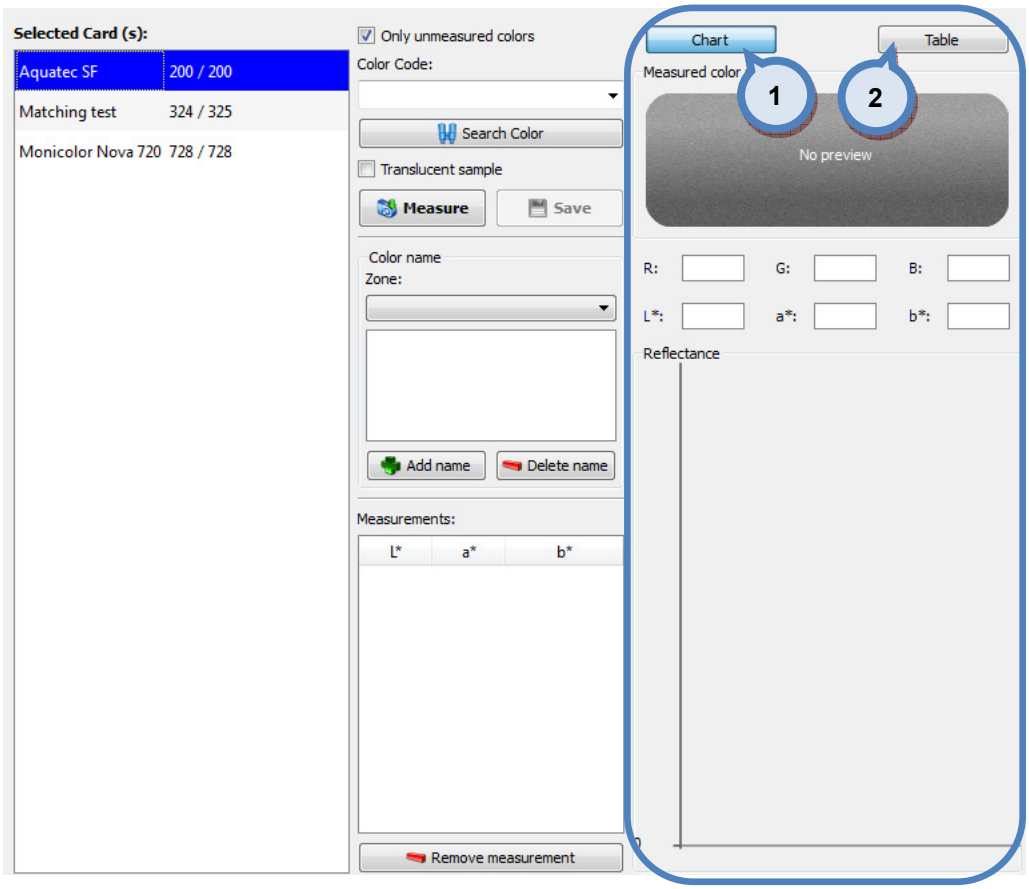
6.Measurements (D65): The text field to display measurement values over black substrate.

7.Measurements (D65): The text field to display measurement values over white substrate.

8.Visual interpretation of values from field 6.

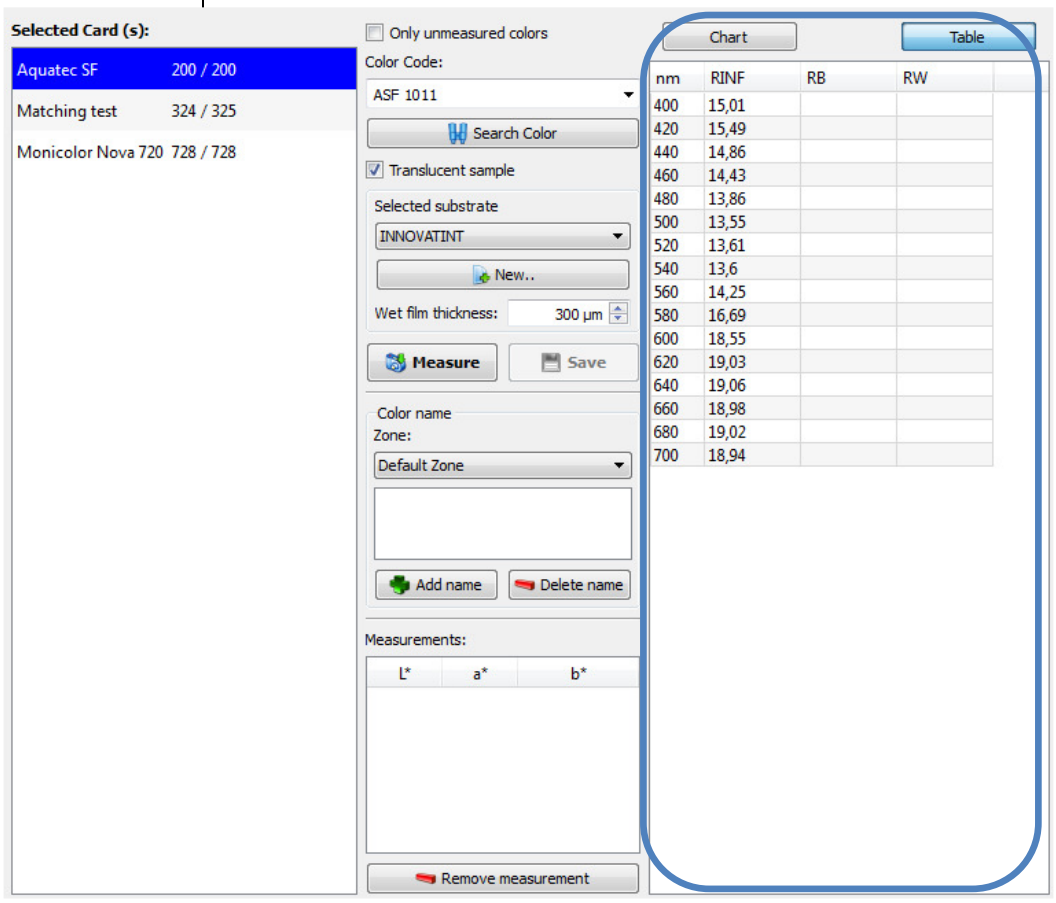
9.Visual interpretation of values from field 7.

In the Measured color preview section, the following options are available:



1.Chart: View measured values as chart.

2.Table: View measured values as table.

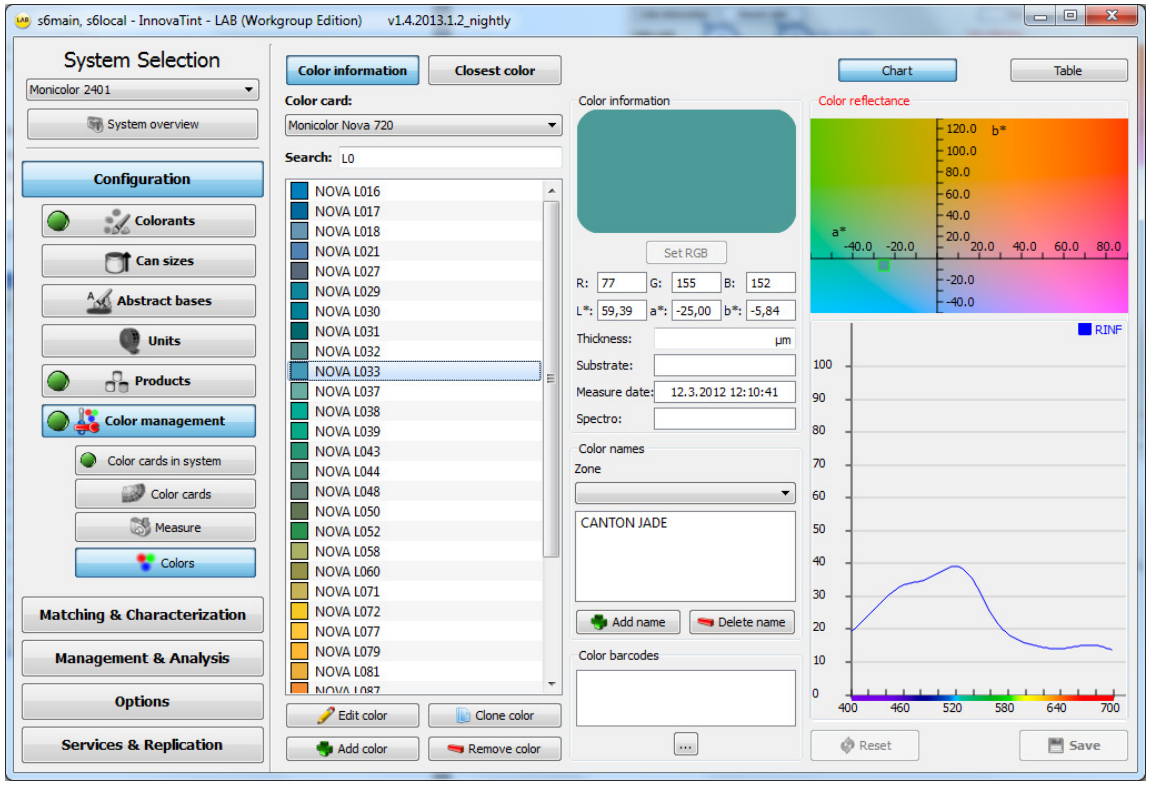


2.6.4 Colors

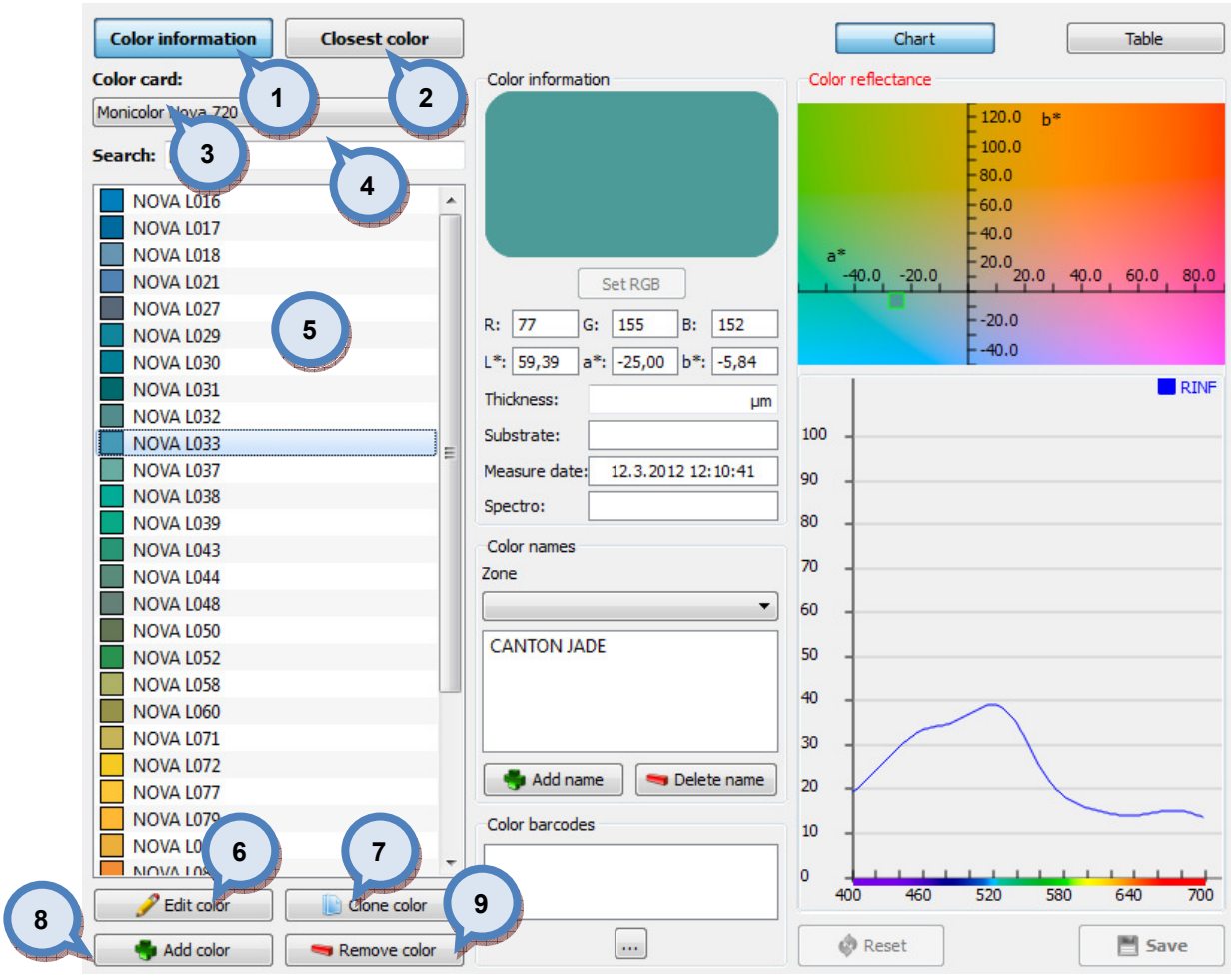
To manage colors measured in color cards, navigate into the **Configuration ⇨ Color management ⇨ Colors** page.

In colors page you can:

- View coloristic information of measurements on both visual and numerical format
- Create and edit color names in zones
- Create and edit bar codes for colors
- Search coloristically similar colors (target color can be either measured or retrieved from database)
- Add reflectance values manually for color



In the **Colors** window, the following items are available:



1.Color Information: The button to view color information.

2.Closest color: The button to search closest color.

3.Color card: The drop down list to select color card.

4.Search: The text field to enter search criteria.

5.Color code list: The text list to show color code search result.

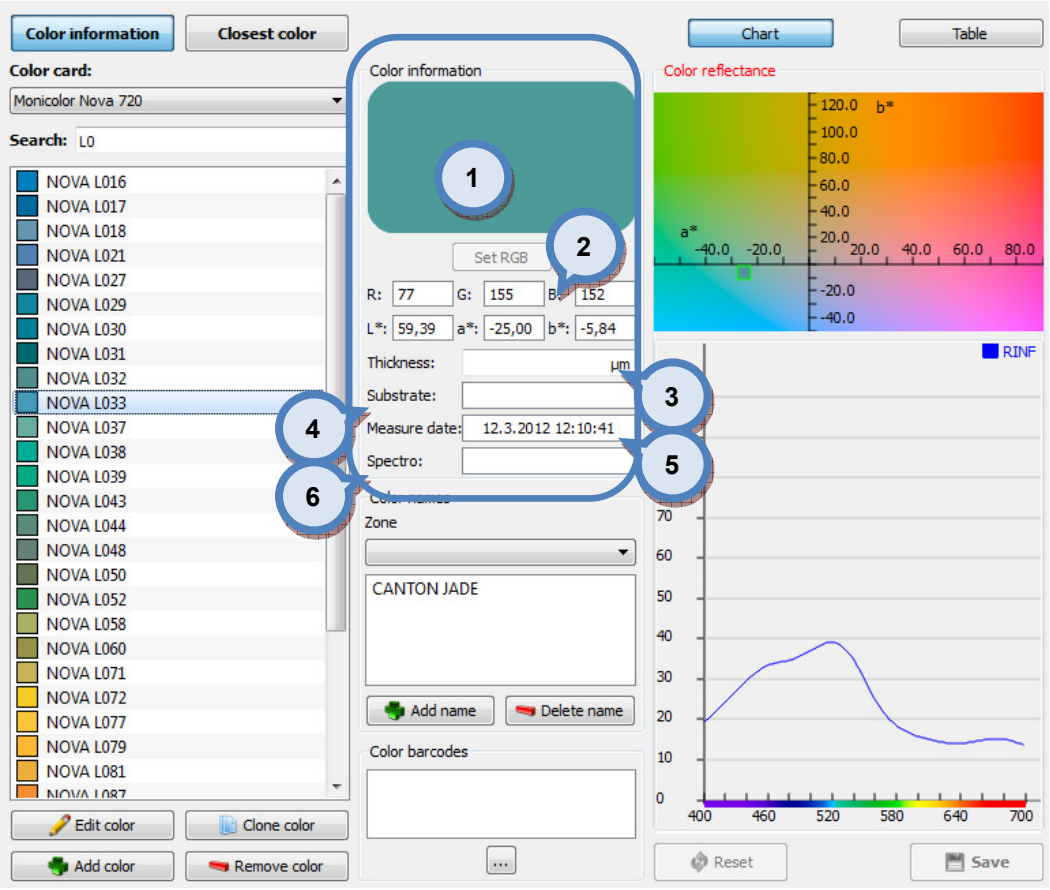
6.Edit color: Allows to edit color code

7.Clone color: Will open a window to clone color values and possible formulas to a new color, see below.

8.Add color: The button to add new color code.

9.Remove color: The button to remove selected color.

When a color code is selected from the list, the following options available on **Color information** section:



1.Color Information: The visual interpretation of the color.

2:The color values: (R, G, B) and (L*, a*, b*).

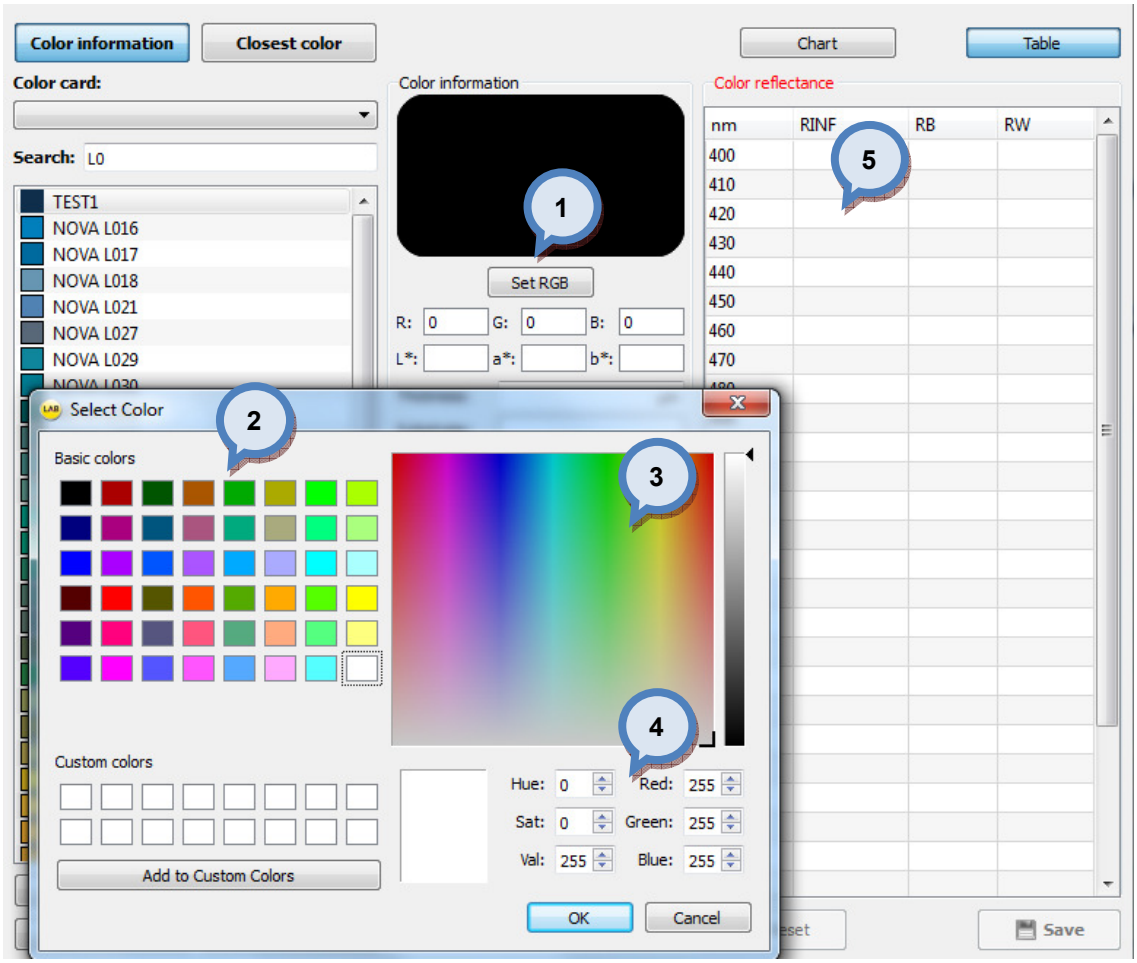
3.Thickness: The text field to show film thickness used on measurement, if data available.

4.Substrate: The text field to show substrate used on measurement, if data available.

5.Measure date: The text field to show date of measurement.

6.Spectro: The text field to show the spectrophotometer used on measurement.

When a color code is selected from the list which has not been measured and does not have reflectance values in the database, the following options available on **Color information** section:



1.Set RGB: The button to manually add RGB values for the color code.

When Set RGB button is clicked, the Select Color window opens up:

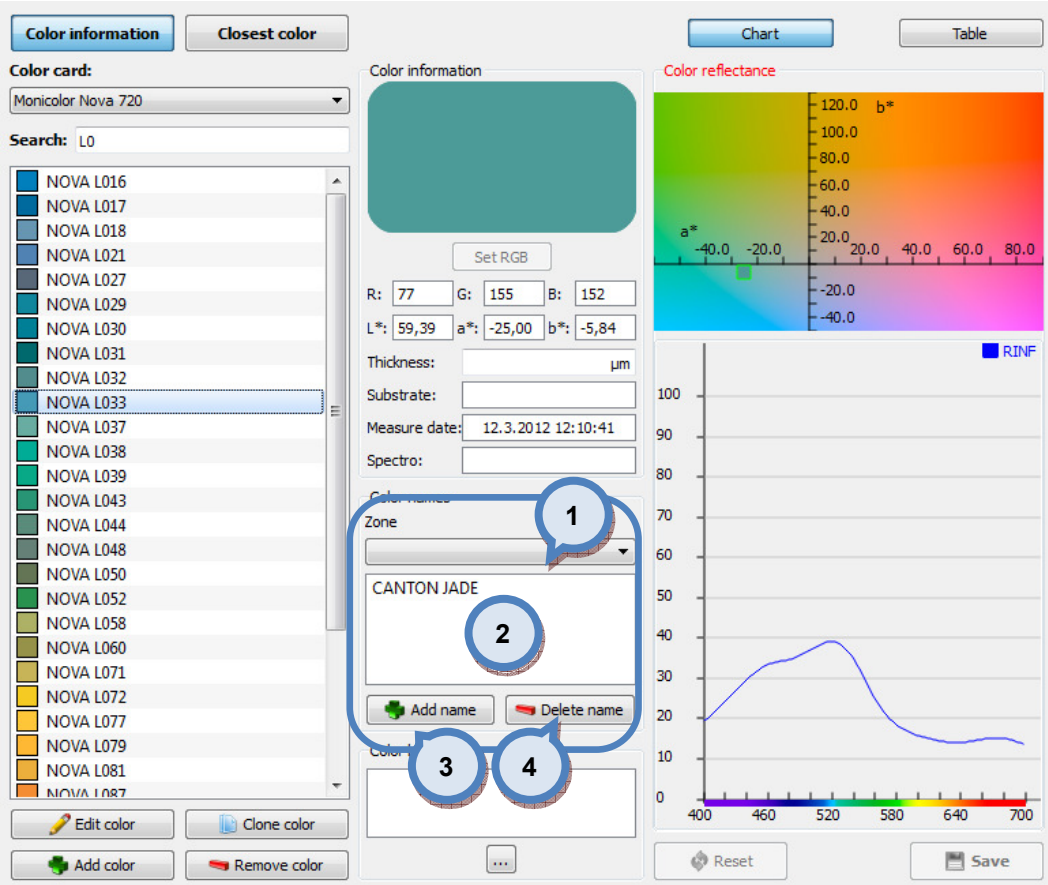
2.Basic colors: The table of basic colors that can be attached to the color code.

3.Color Hue and Saturation selector fields: Color hue space can be used to select desired hue and with the slider user can fine tune the saturation.

4.Hue, Sat, Val, Red, Green, Blue: The numerical fields to input color values by numbers.

5.Manual reflectance input: Color reflectance values may be inputted manually.

In the **Color names** section, the following items available:



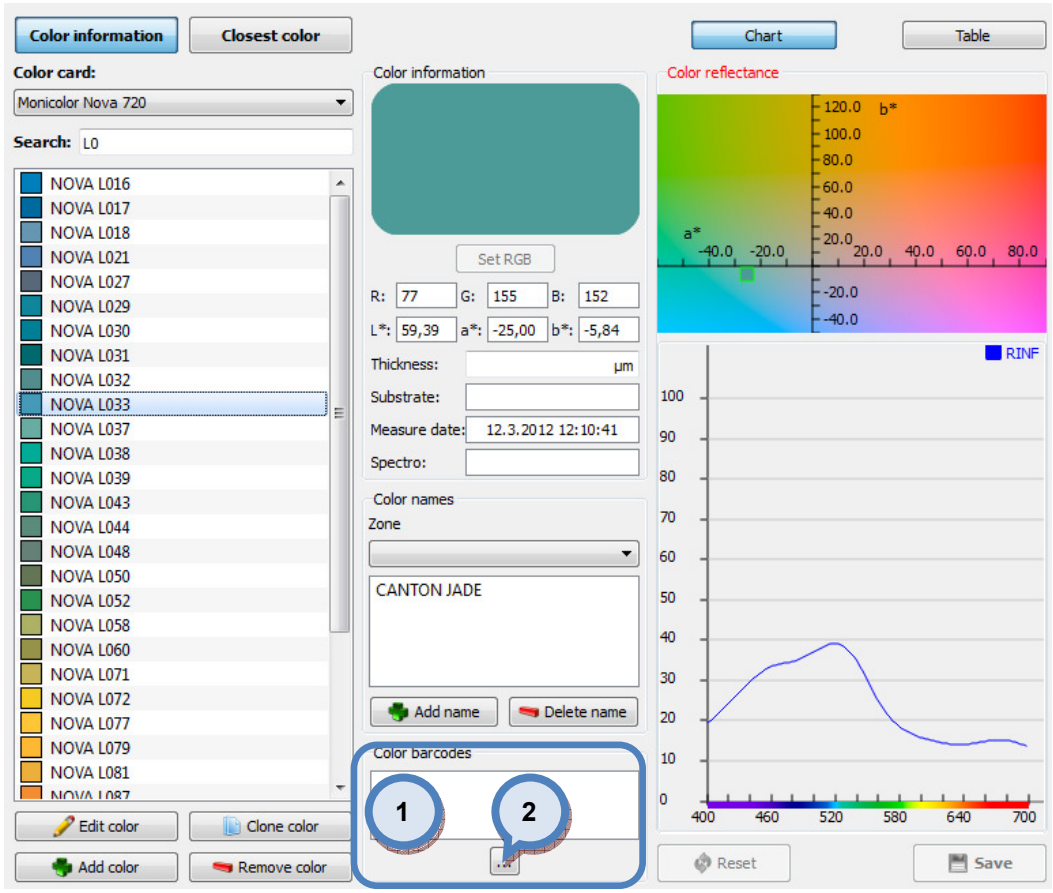
1.Zone: The drop down list to select the zone.

2:The text field to show color names for selected color code.

3.Add name: The button to add a color name.

4. Delete name: The button to delete a selected color name.

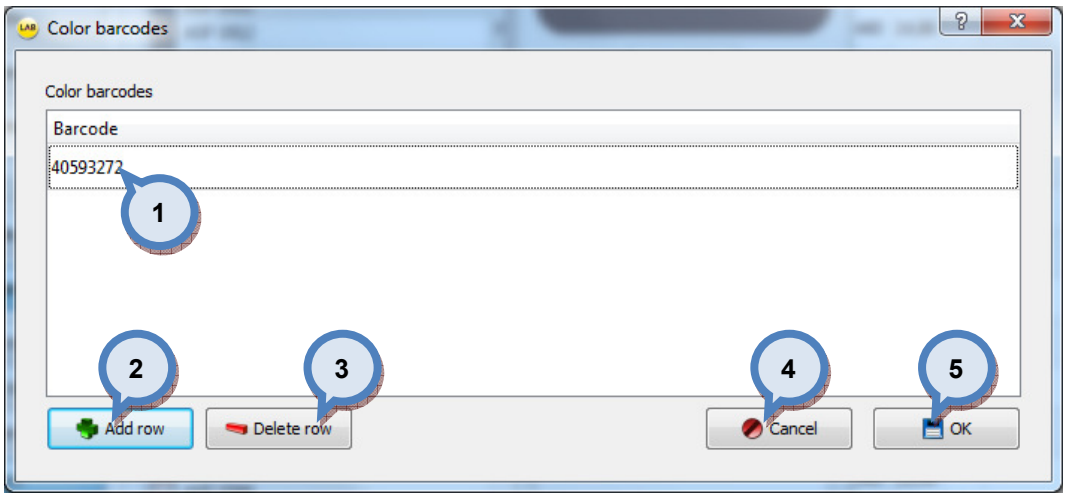
In the **Color barcodes** section, the following items available:



1.Color barcodes: The text field to show all bar codes for selected color code.

2. **:** The button to add new bar code.

When the button is clicked, following options are available:



1.Barcode: The text field for bar code.

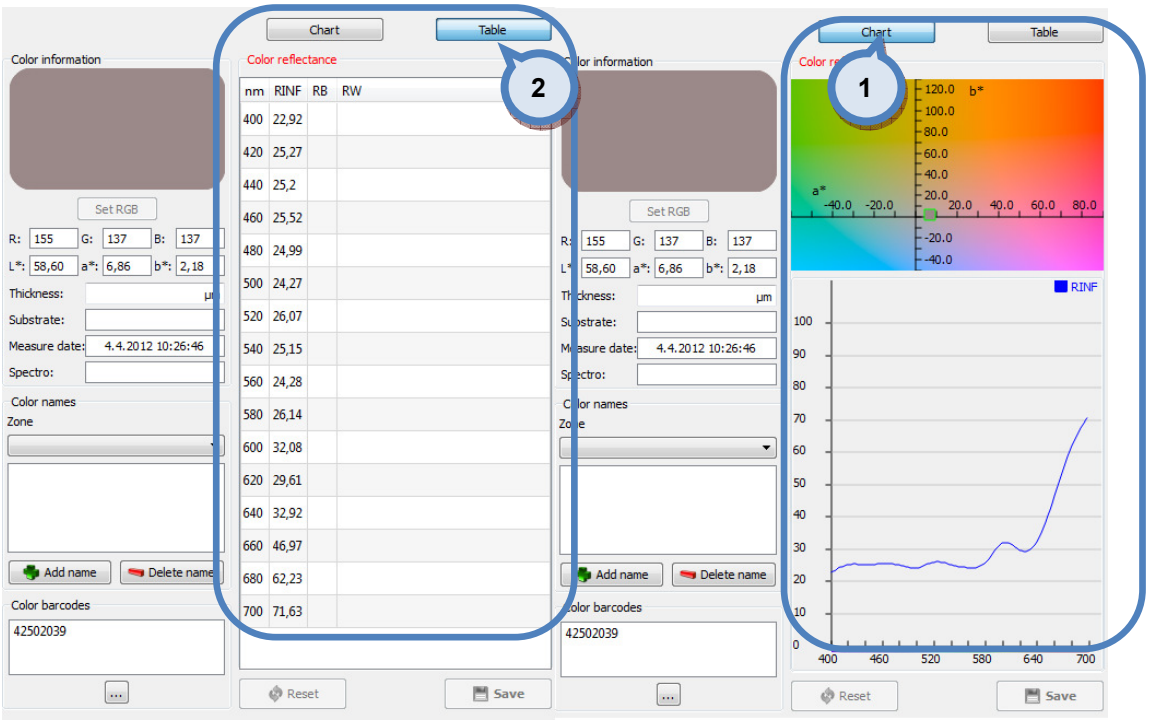
2.Add row: The button to add new bar code.

3.Delete row: The button to delete selected bar code.

4.Cancel: The button to cancel all changes made.

5.OK: The button to exit this window and save bar code information.

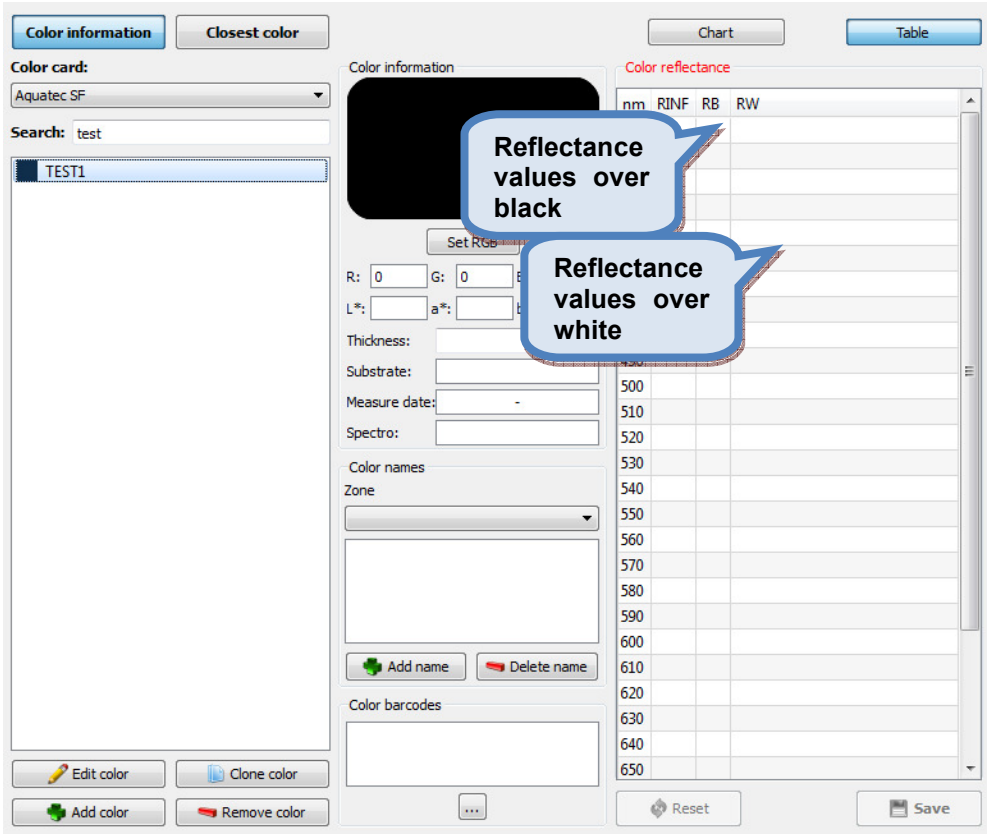
In the **Color reflectance** section, the following options are available:



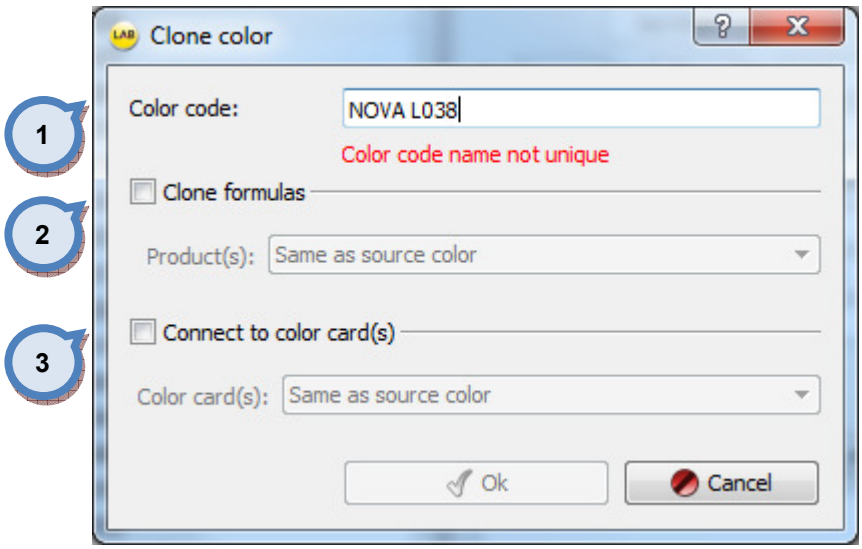
1.Chart: View measured values as chart.

2.Table: View measured values as table.

When the color is not measured in to the database, the reflectance values over black substrate **(RB)** and over white substrate **(RW)** can be manually inputted in to the columns RB and RW in the table view or simply entering one set of values in to full hiding (**RINF**) column.



In the **clone color** area, following options are available:

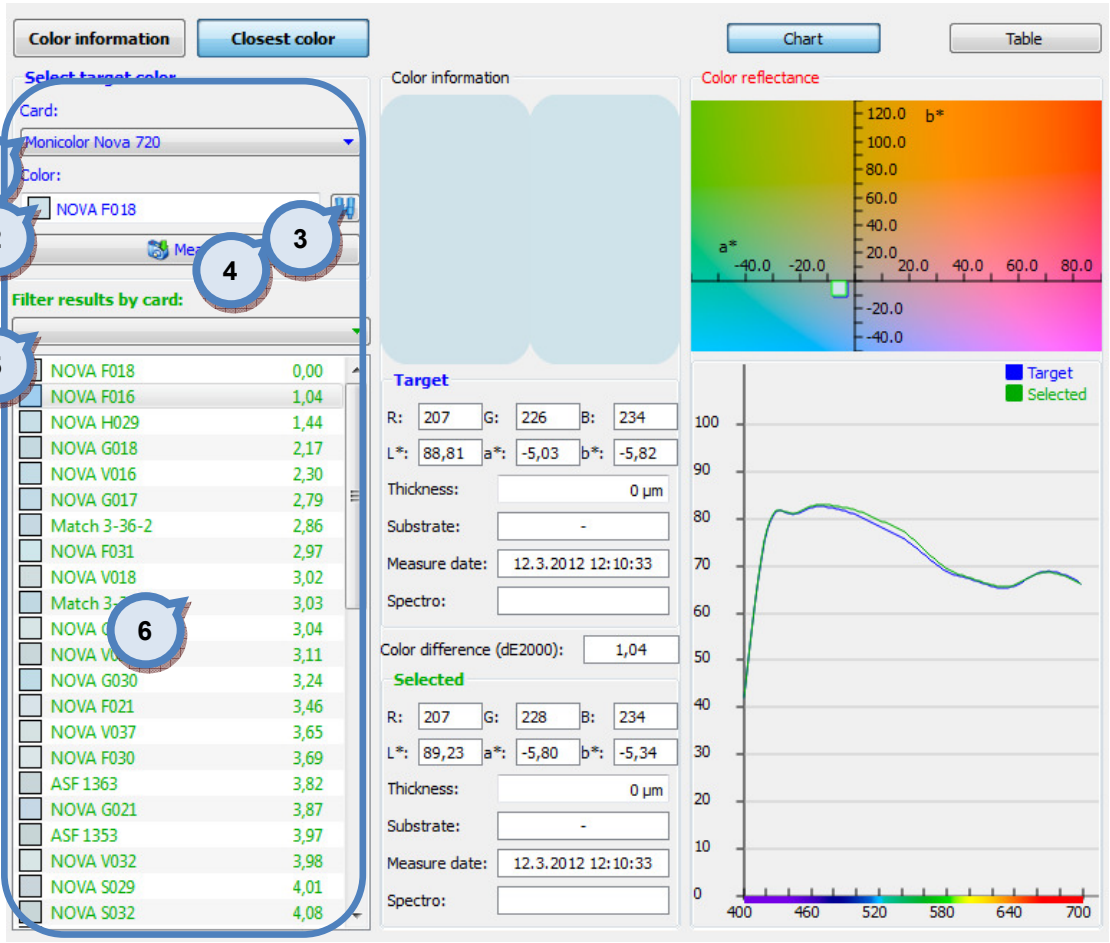


1.Color code: Cloned color must have a new unique name. All coloristic data is cloned

2.Clone formulas: If the check box enabled, and "same as source color" selected from the dropdown list, formulas associated to original code are cloned. Alternatively single product can be selected from the list.

3.Connect to color card(s): If the check box enabled, and "same as source color" selected from the dropdown list, new color will be cloned to same color cards as the original copy belong to. Alternatively single color card can be selected from the list.

In the **Closest color** section, the following options are available:



1.Card: Select the target color card from the dropdown list

2.Color: Select the color from the dropdown list or type in part of the color code to limit options

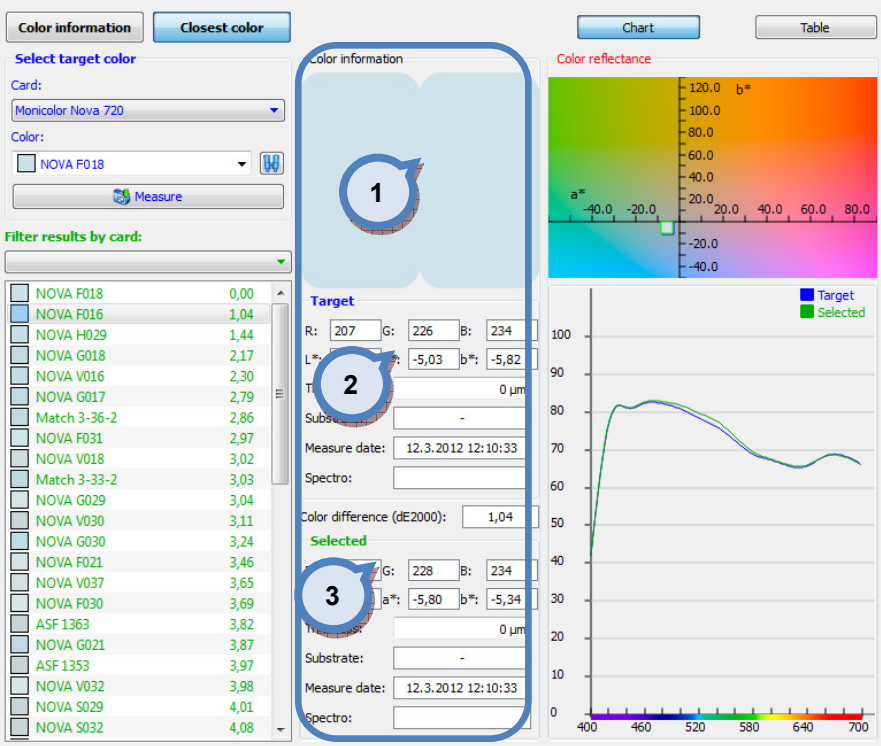
3. Search: Click the search button if search criteria given. Color list will display possible options.

4.Measure: Option to measure a target color if it's not known.

5. Filter results by card: Limit the search area to specific color card by selecting it from the dropdown list.

6. Results are shown in closest to match order. First color code followed by color difference.

In the **Color information** section, the following options are available:

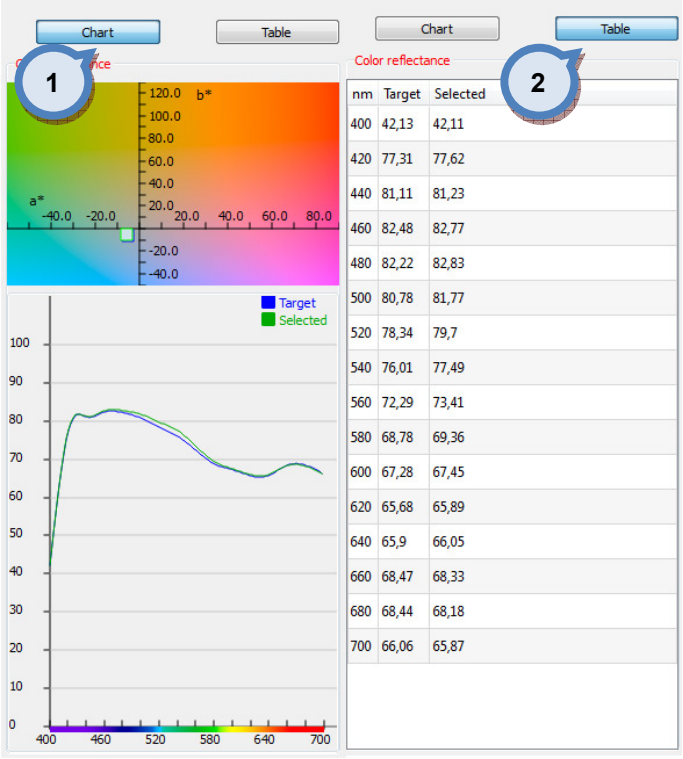


1.RGB representation of the target and selected color

2.Target: Coloristic values of the target

3. Selected: Coloristic values of the selected color.

In the **Color reflectance** section, the following options are available:



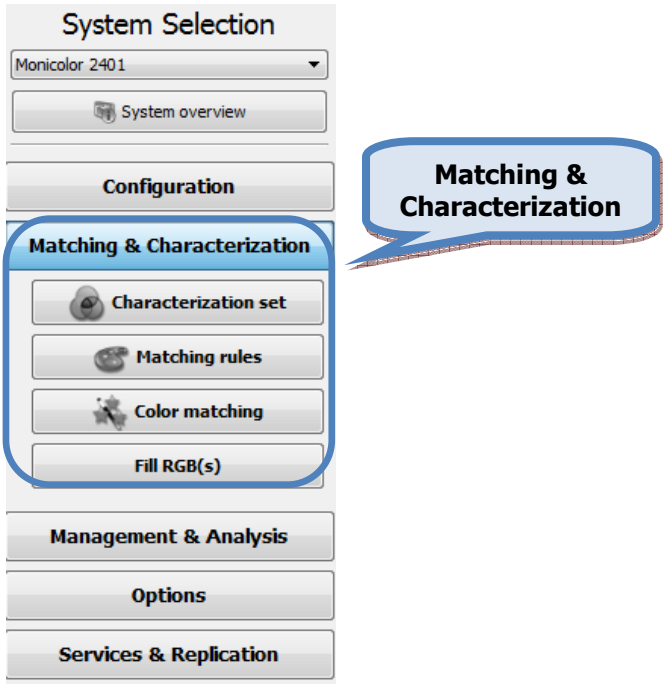
1.Chart: View measured values as chart.

2.Table: View measured values as table.

3 Matching & Characterization

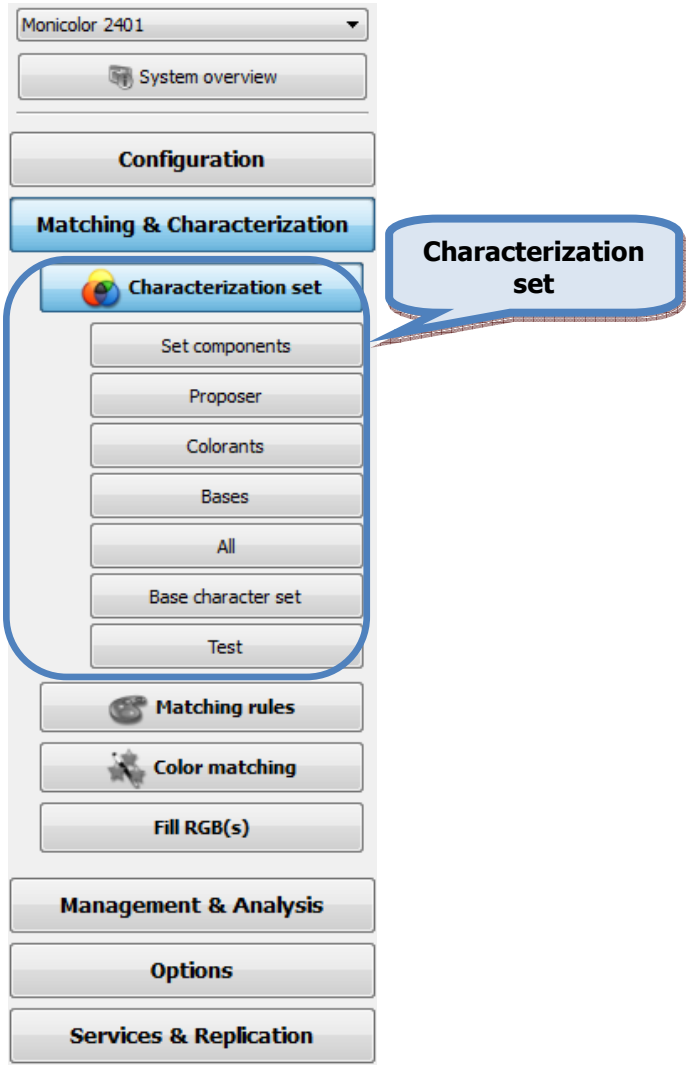
Matching & characterization page has three sub pages, where you can:

- Create characterization set
- Set matching rules
- Match colors
- Fill color values (RGBs) for visual presentation of the color



3.1 Charaterization set

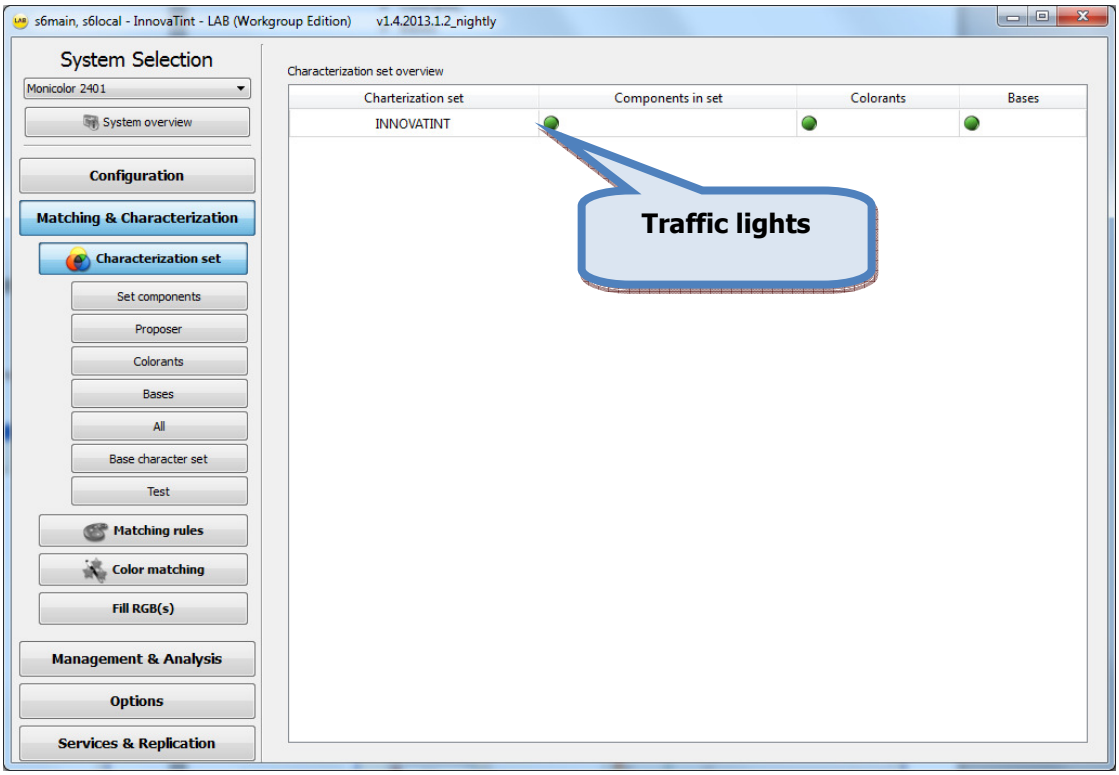
To get an overview on characterization status of whole system, navigate into the **Matching & Characterization** ⇨ **Characterization set** page.



In characterization set section you have five sub pages:

- Set components,
- Proposer,
- Colorants,
- Bases
- All
- Base character set, and
- Test.

With "traffic light" symbols, you can easily see which components are completed and which still need further work, in order to get matching fully working.

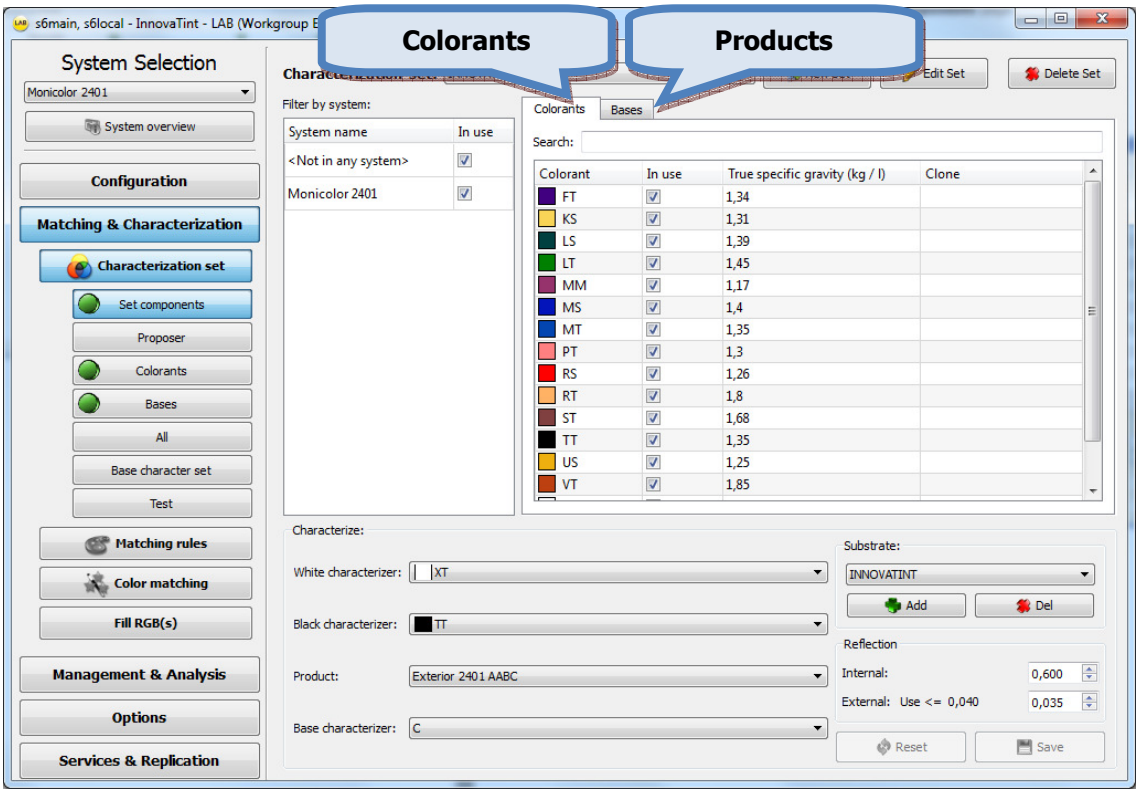


3.1.1 Set components

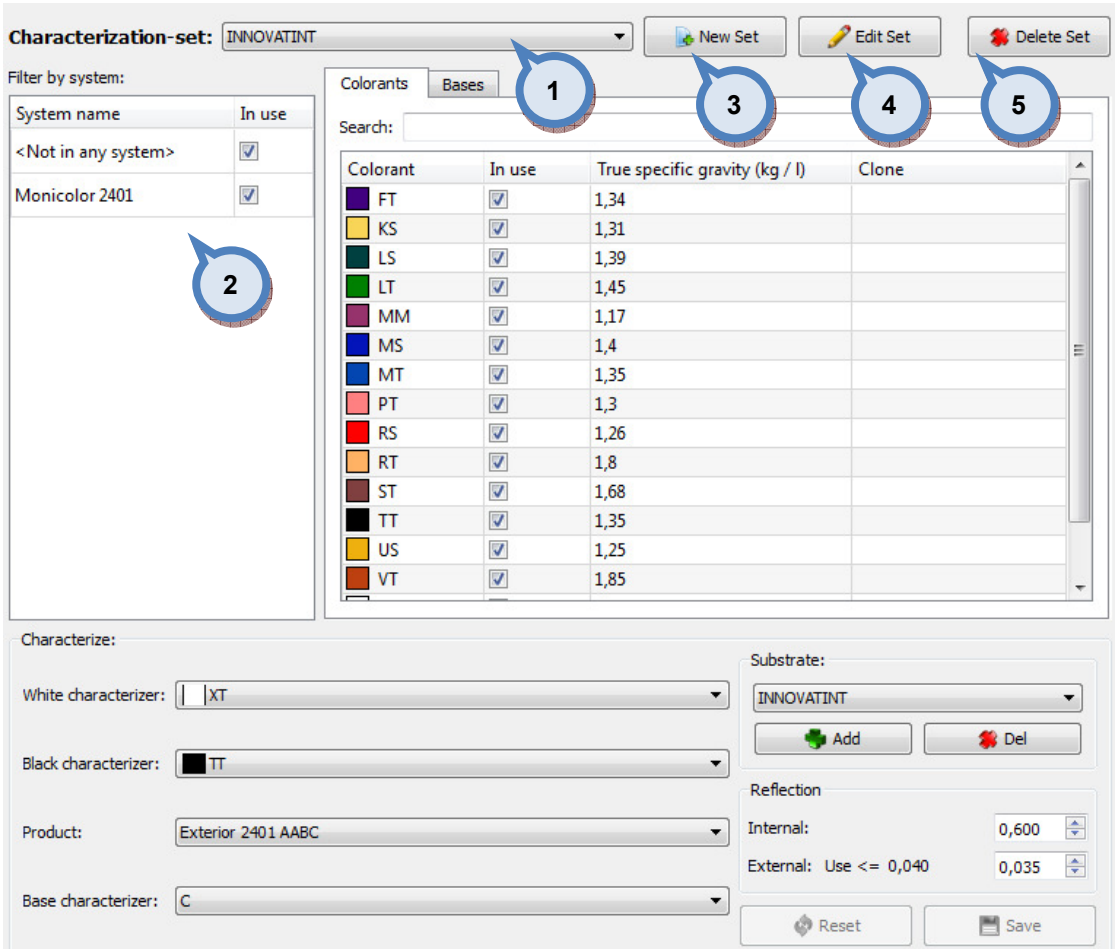
To create a set of colorants and products to be used in system creation, navigate into the **Matching & Characterization ⇨ Set components** page.

In set components page you have 2 tab pages:

- Colorants, and
- Products.



In the **Characterization set** window, the following options are available:



1.Characterization set: The drop down menu to select characterization set.

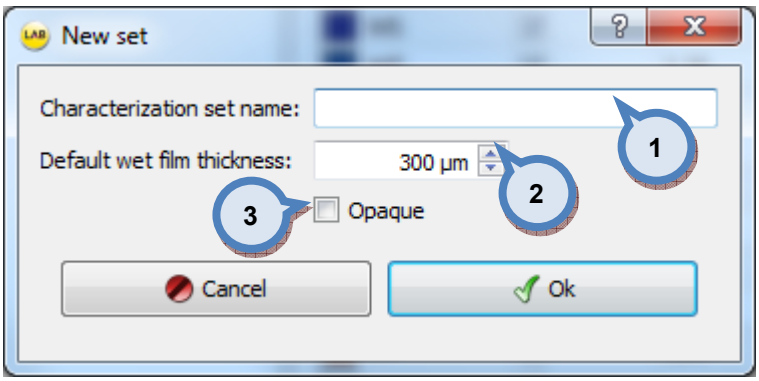
2.Filter by system: The table to show all systems, and **In use** check box to determine which systems are used in selected characterization set.

3.New Set: The button to create a new characterization set (name).

4.Edit Set: The button to edit a characterization set (name).

5.Delete Set: The button to delete a characterization set.

When the **New set** button is clicked, following window opens up:

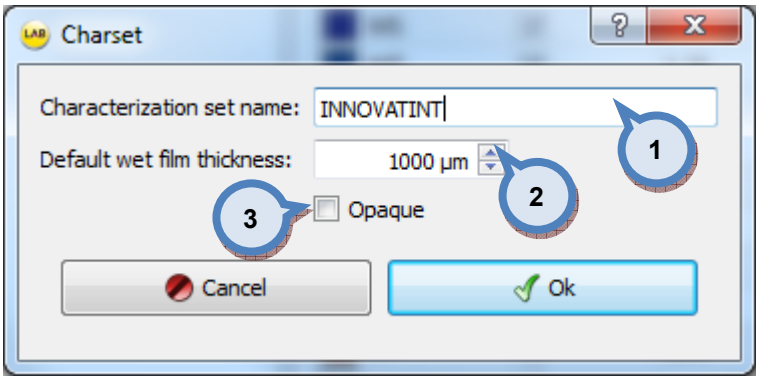


1.Characterization set name: The text field for the name of the characterization set.

2.Default wet film thickness: The text field for default film thickness used in characterization.

3.Opaque: When the check box is enabled, the characterization draw downs are treated as fully hiding. Otherwise measurements over black and substrate is used.

When the **Edit set** button is clicked, following window opens up:

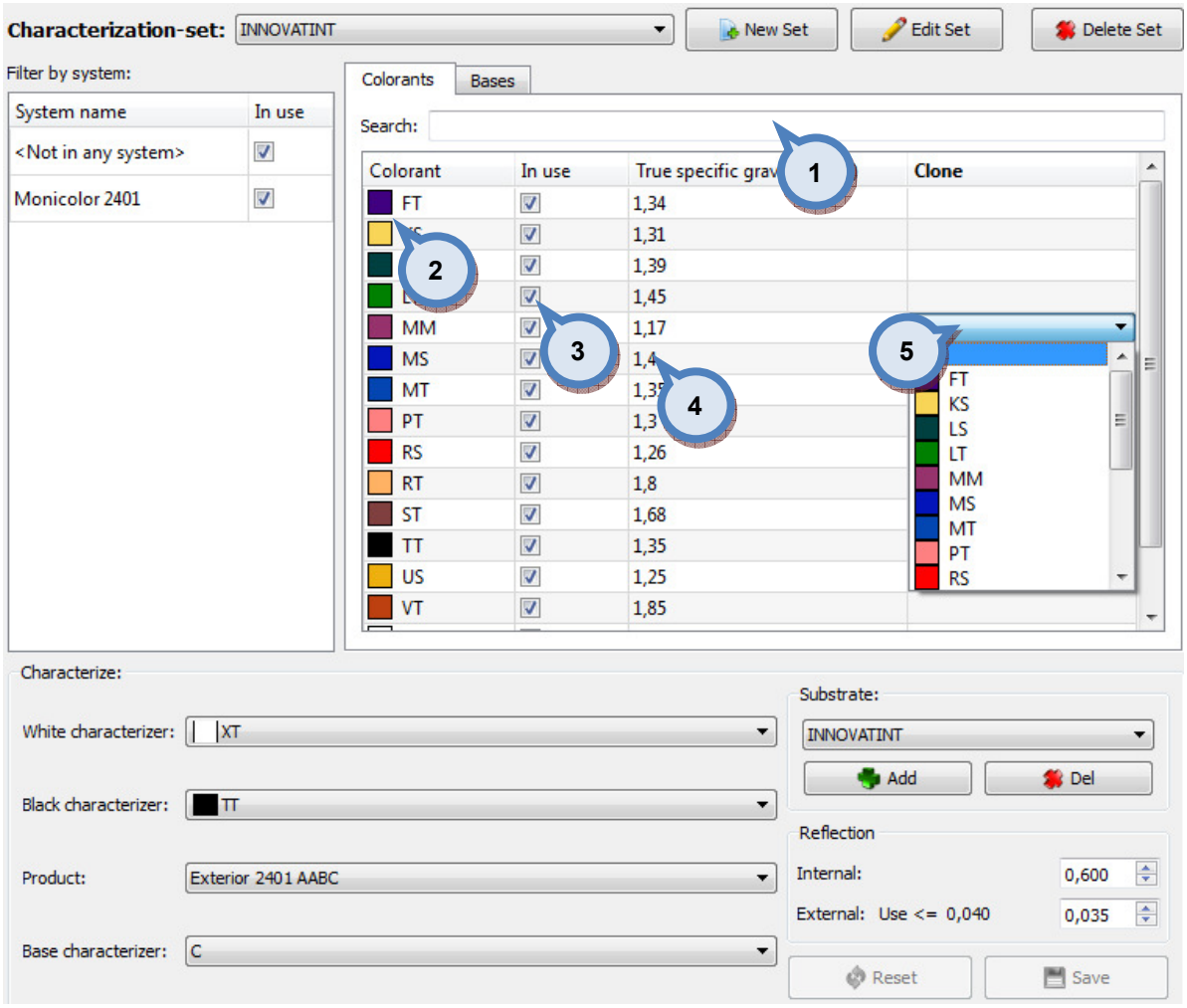


1.Characterization set name: The text field for the name of the characterization set.

2.Default wet film thickness: The text field for default film thickness used in characterization.

3.Opaque: When the check box is enabled, the characterization draw downs are treated as fully hiding. Otherwise measurements over black and substrate is used.

In the **Colorants** tab page of the **Characterization set** window, the following options are available:



1.Search: The text field to enter search criteria to search for a colorant.

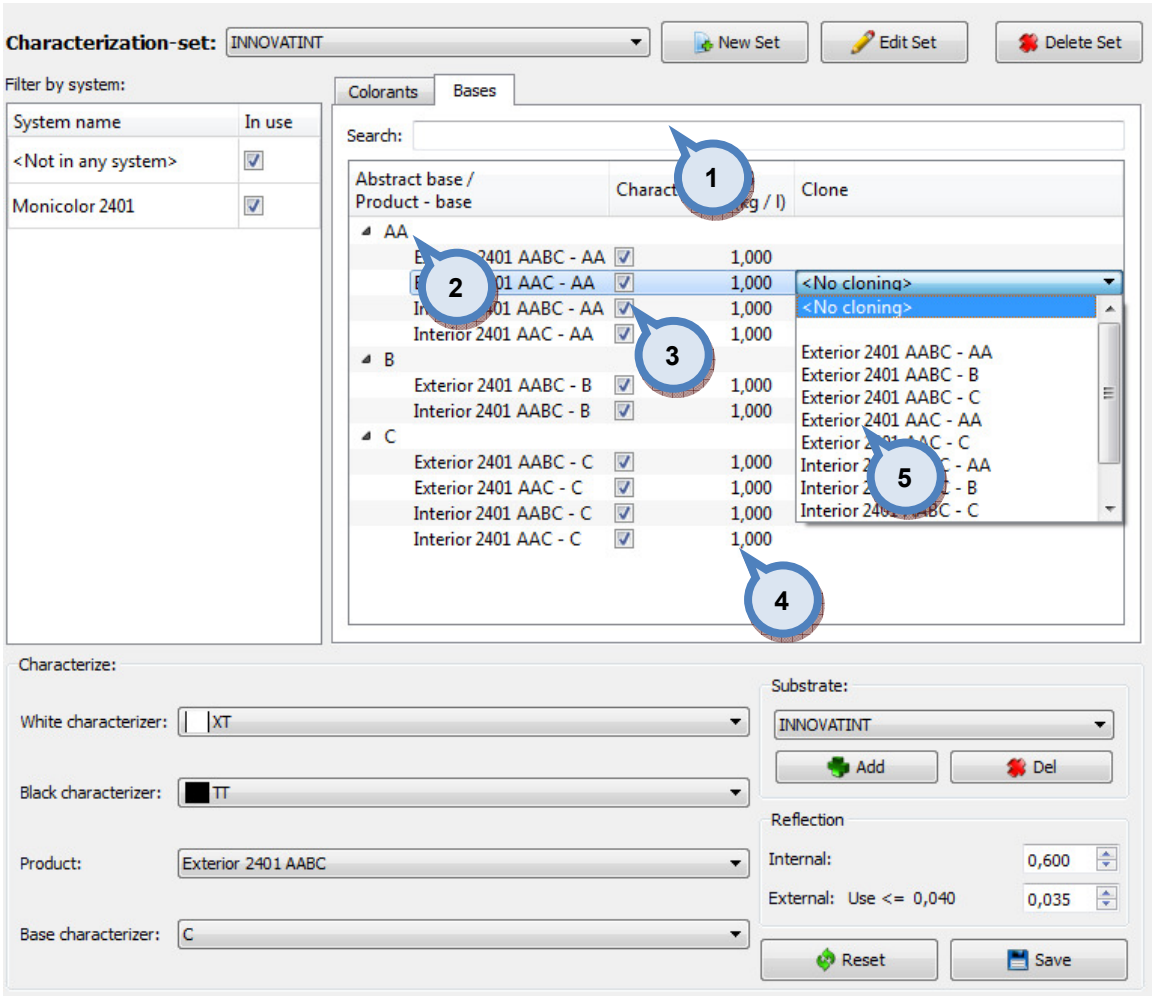
2.Colorant: The name or code of the colorant

3.In use: When the check box is enabled, the colorant is used in characterization.

4.True specific gravity: The text field for actual density of colorant used in characterization draw downs. The unit of measure is kg/litre.

5.Clone: The drop down menu to select colorant to be used as a clone. With this selection, identical characterization information is used on the both colorants.

In the **Bases** tab page of the **Characterization set** window, the following options are available:



1.Search: The text field to enter search criteria to search for a product.

2.Abstract base / Product - base: The table to show all Abstract bases and products/bases associated to it.

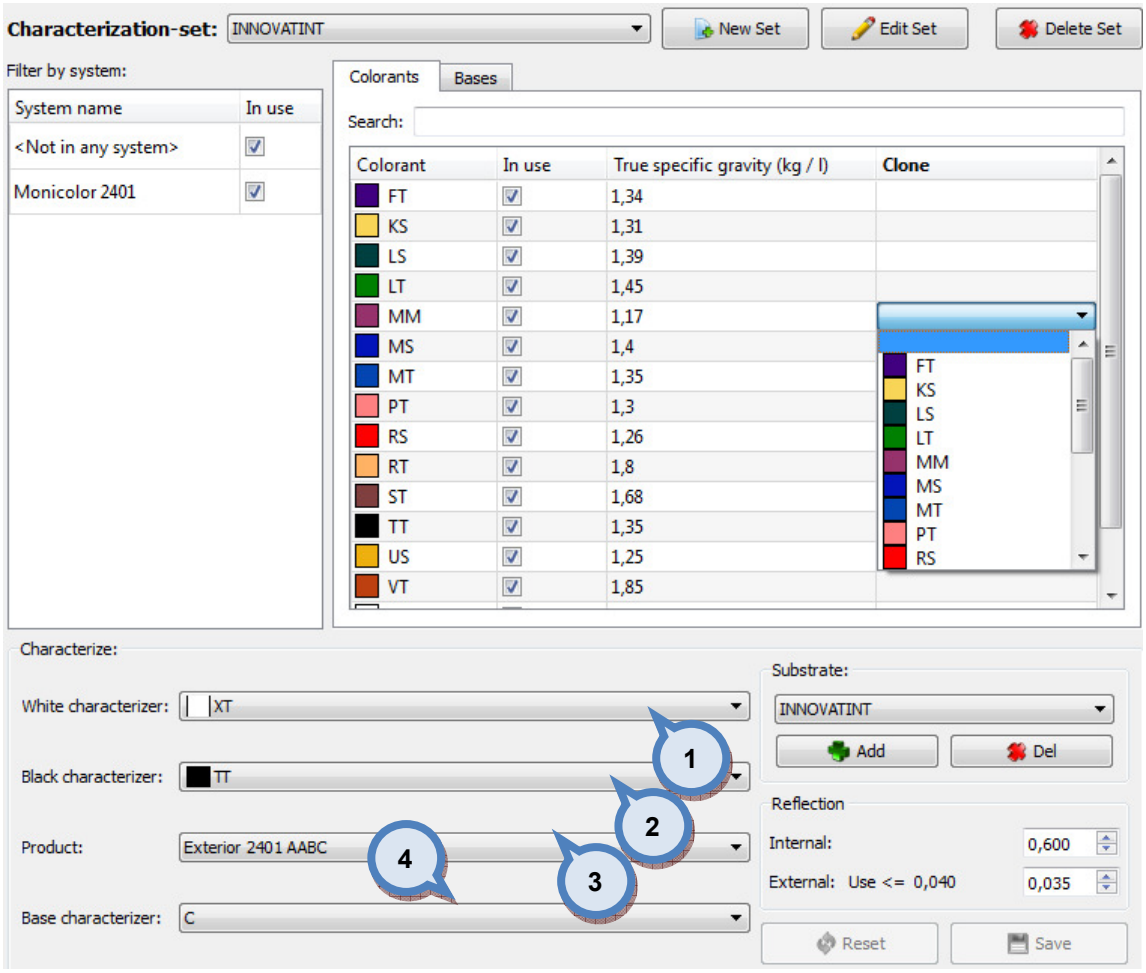
3.Characterize: When the check box is enabled the base paint is used in characterization

4.SG: The text field for actual density of colorant used in the characterization draw downs. The unit of measure is kg/litre.

5.Clone: The drop down menu to select the base paint used as a clone.

NOTE: If the clone is selected on the Abstract base level, product used in characterization will share its KS-data with all the other products sharing the same Abstract base.

In the **Characterize** section of the **Characterization set** window, the following options are available:



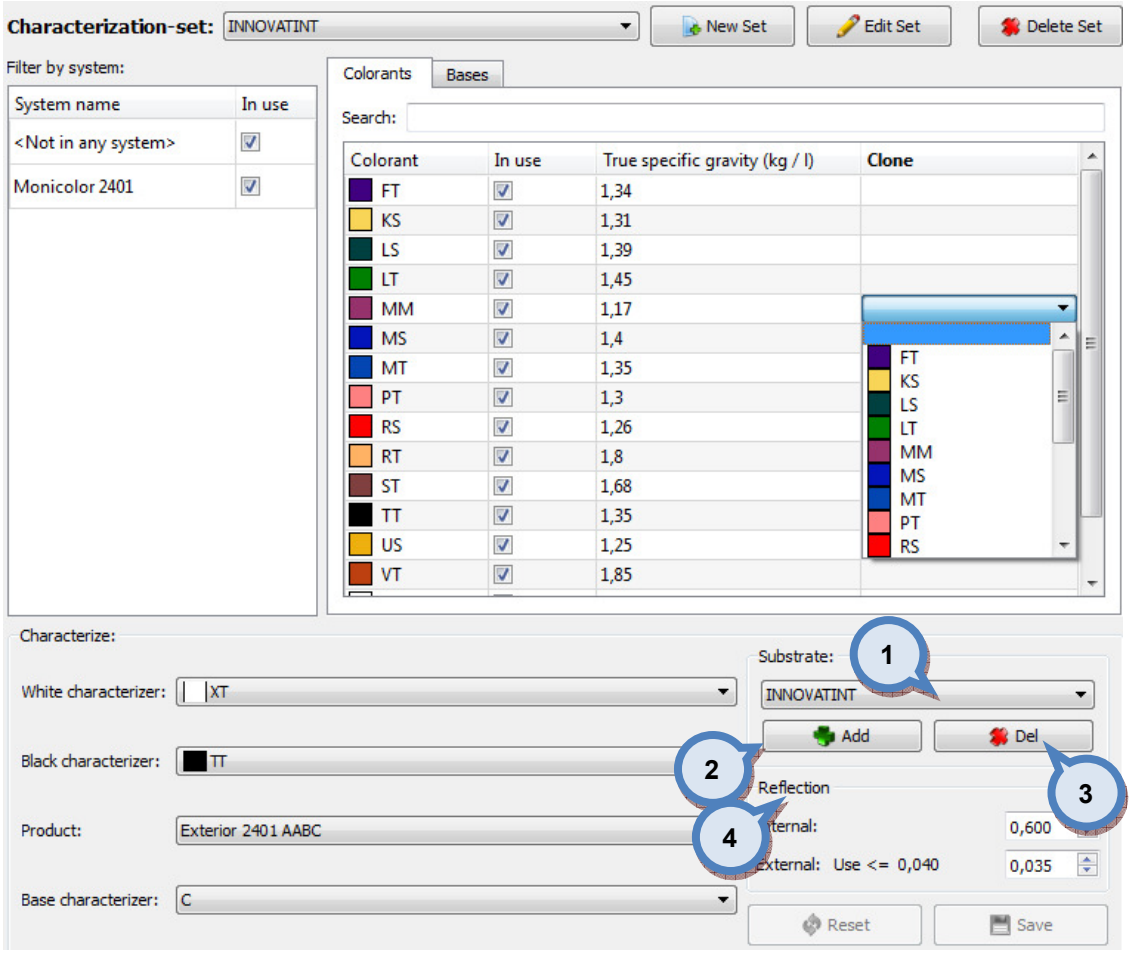
1.White characterizer: The drop down menu to select the white colorant used in the characterization.

2.Black characterizer: The drop down menu to select the black colorant used in the characterization.

3.Product: The drop down menu to select the product used in the characterization.

4.Base characterizer: The drop down menu to select the base paint used in the characterization.

In the **Substrate** section of the **Characterization set** window, the following options are available:



1.Substrate: The drop down menu to select the substrate used in the characterization.

2.Add: The button to create a new substrate to be used in the characterization.

3.Del: The button to delete selected substrate.

4.Reflection: The text fields to adjust internal and external reflection values. The internal reflection value is typically between 0.6 and 0.46 (when default value is 0.6). The external reflectance value is typically between 0.03 and 0.04 (where the "USE" value proposes the value to be used. Based all measurement data). The change of these values required the KS data re-calculation for the whole set.

When the **Add** button is clicked, following window opens up:

1.Substrate code: The text field for a substrate code or name.

2.Measure RB: The button to measure substrate over black background.

3.Delete measurement: The button to delete selected measurement from the field 6.

4.Measure RW: The button to measure substrate over white background.

5.Delete measurement: The button to delete selected measurement from the field 7.

6.Measurements (D65): The text field to display measurement values over black substrate.

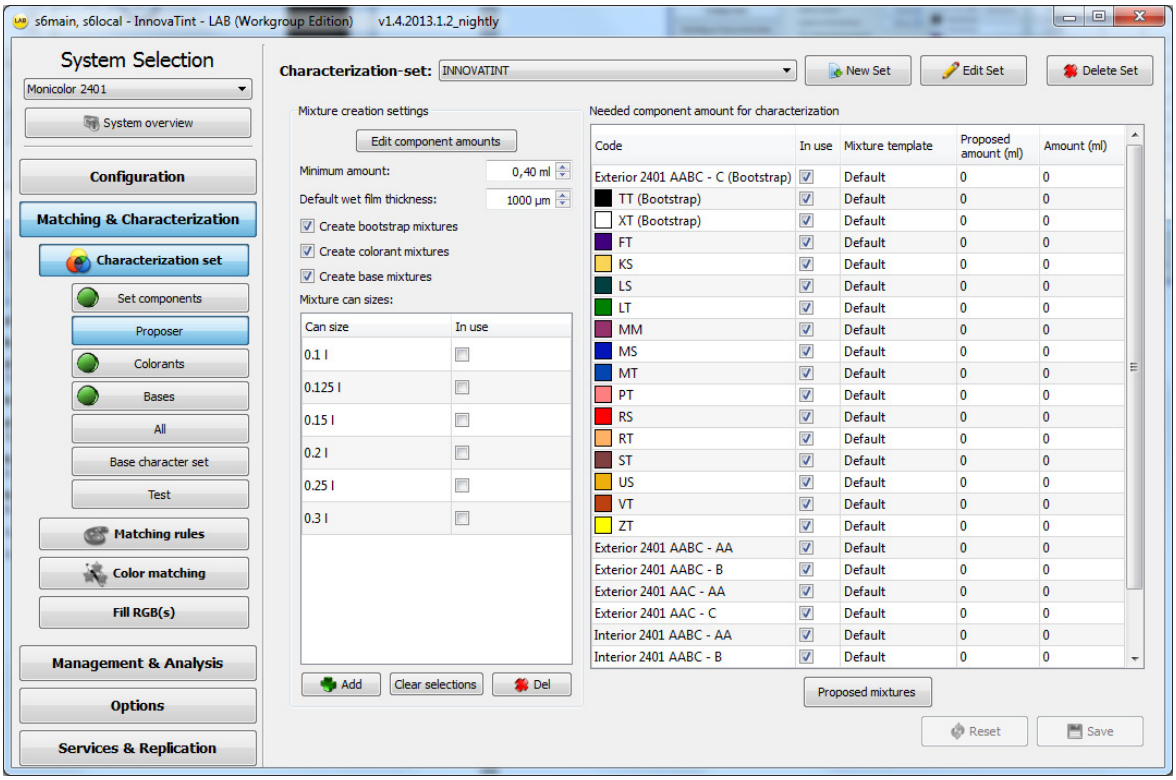
7.Measurements (D65): The text field to display measurement values over white substrate.

8.Visual interpretation of values of the field 6.

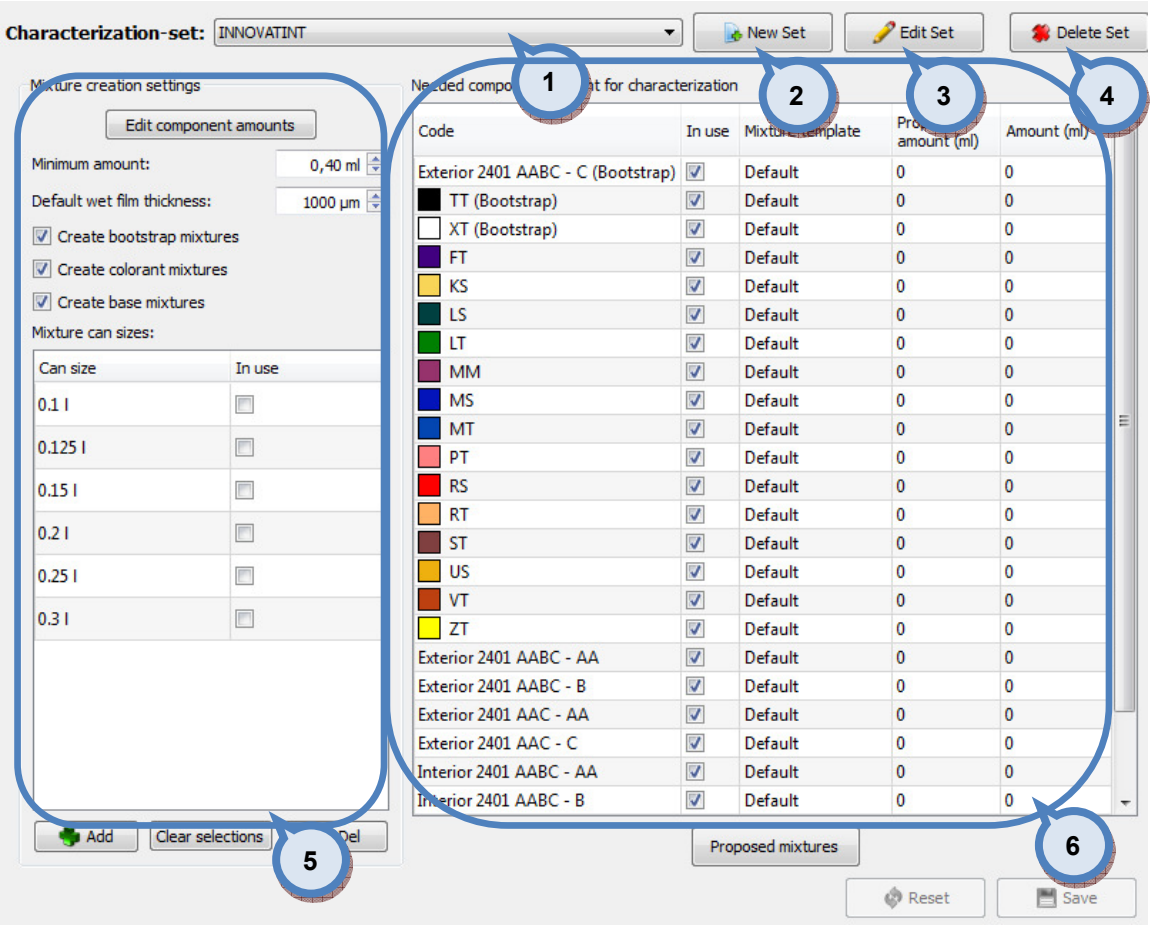
9.Visual interpretation of values of the field 7.

3.1.2 Proposer

In the proposer window you will select can sizes for paint mixtures which you will use for making the characterization draw downs. From this page you can also see the total amount of the colorants and the base paints you need for making the needed draw downs.



In the **Proposer** window, the following options are available:



1.Characterization set: The drop down menu to select the characterization set.

2.New Set: The button to create a new characterization set (name).

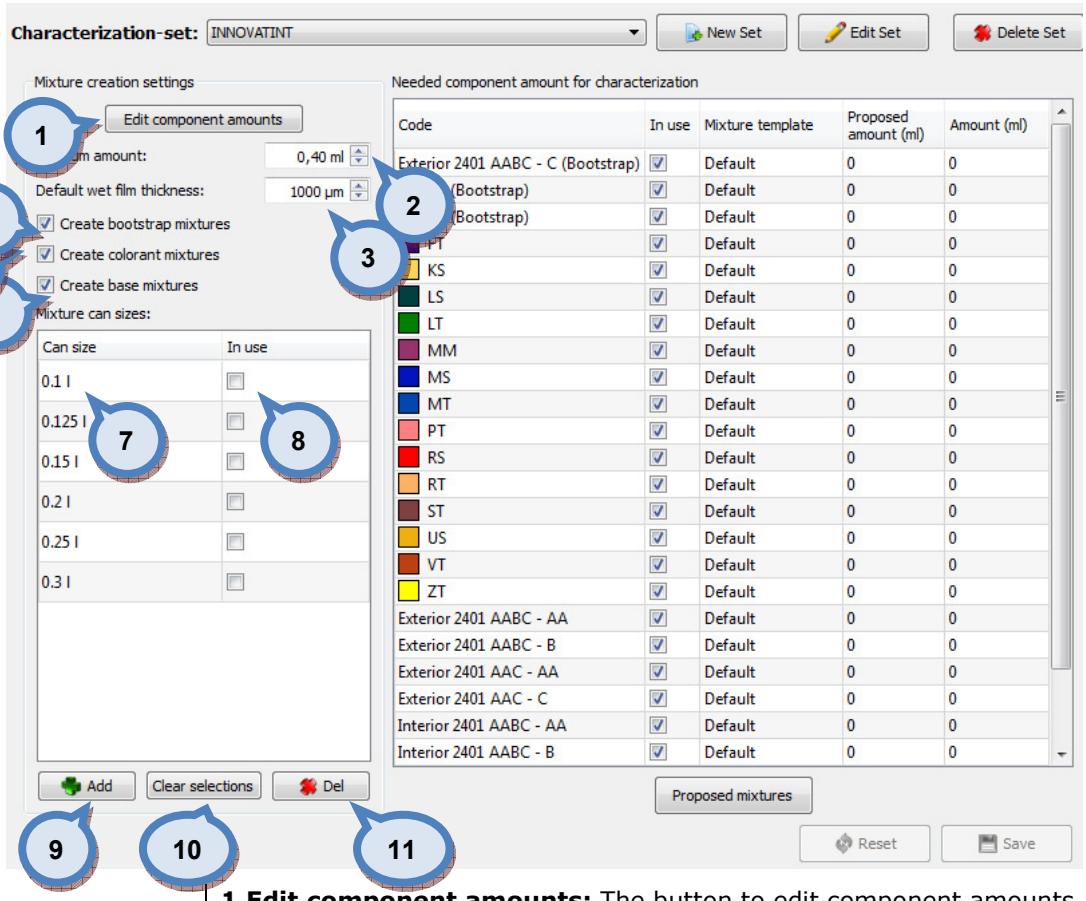
3.Edit Set: The button to edit a characterization set (name).

4.Delete Set: The button to delete a characterization set.

5.Mixture creation settings: The settings to create needed mixtures for characterization.

6.Needed component amount for characterization: Needed component amounts for the characterization and the mixture template selected component uses.

In the **Mixture creation settings** section of the **Proposer** window, the following options are available:



1.Edit component amounts: The button to edit component amounts.

2.Minimum amount: The text box to enter value for lowest allowed component amount. The unit of measure is millilitres.

3.Default wet film thickness: The text box to enter value for default film thickness. The unit of measure is micrometres.

4.Create bootstrap mixtures: When check box is enabled, bootstrap mixtures (the mixtures for the characterization white and the black) are created.

5.Create colorant mixtures: When check box is enabled, the colorant mixtures are created.

6.Create base mixtures: When check box is enabled, the base paint mixtures are created.

7.Can size: The list of can sizes available.

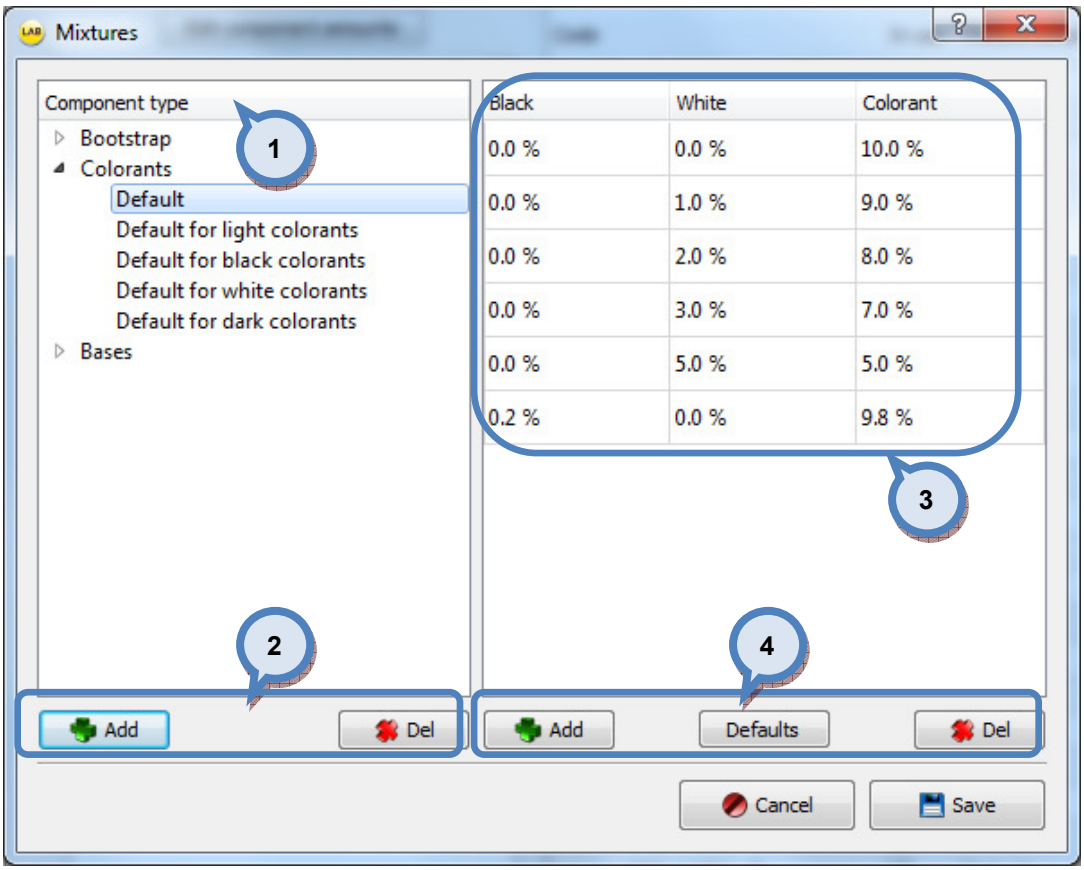
8.In use: When the check box is enabled, selected can size is used for the mixtures.

9.Add: The button to add a new can size.

10.Defaults: The button to clear can size selection.

11.Del: The button to delete selected can size.

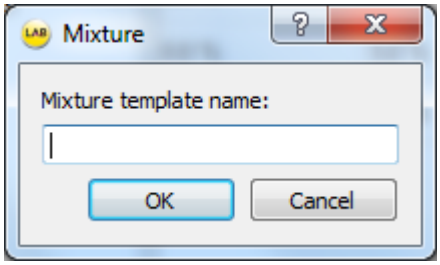
When **Edit component amounts** button is clicked, the following options are available:



1.Component type: The list of component types (bootstrap, colorants, and bases) with the mixture templates. To view mixtures, select a template with left hand side mouse button.

2.Add, Del: The buttons to add and delete a mixture template.

When the Add button is clicked, the following window is opened up. Type in the name for the template into the text field.



3.The values for the black, white, and colorant in the mixtures of the selected template.

4.Add, Defaults, Del: The buttons to modify the mixtures.

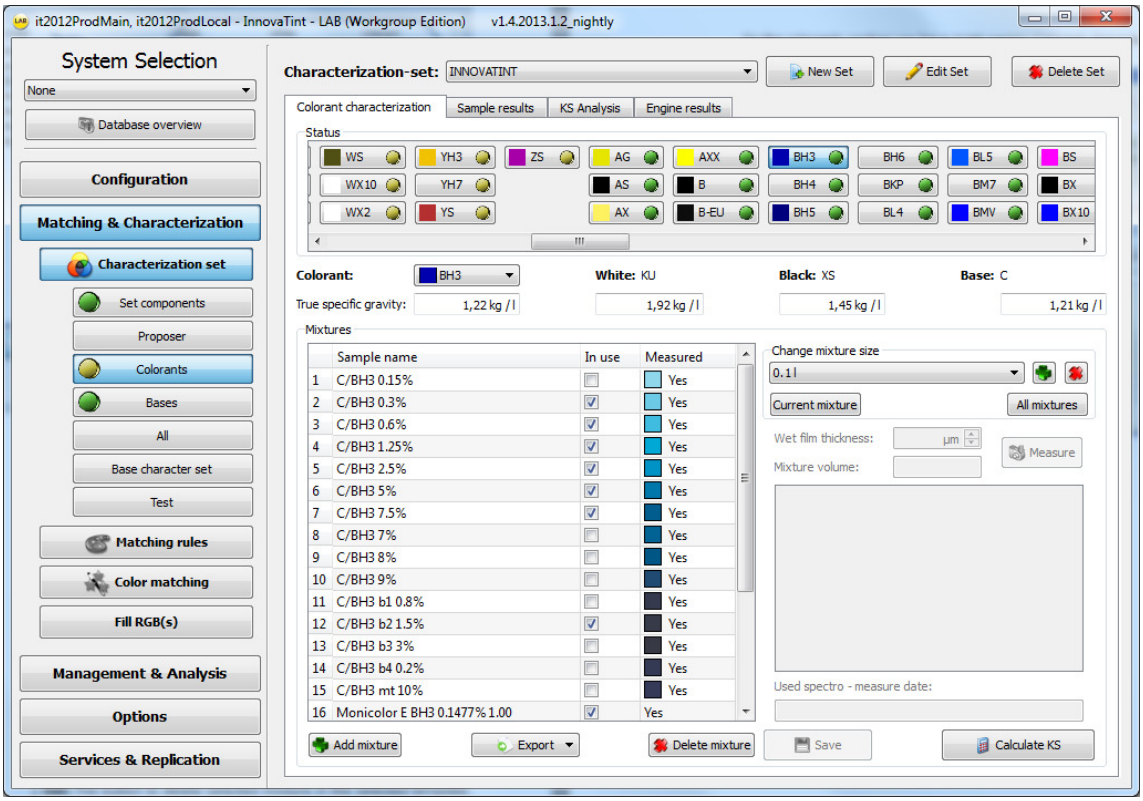
Add: The button to add new mixture into the selected template.

Defaults: The button to restore default mixture values into the selected template.

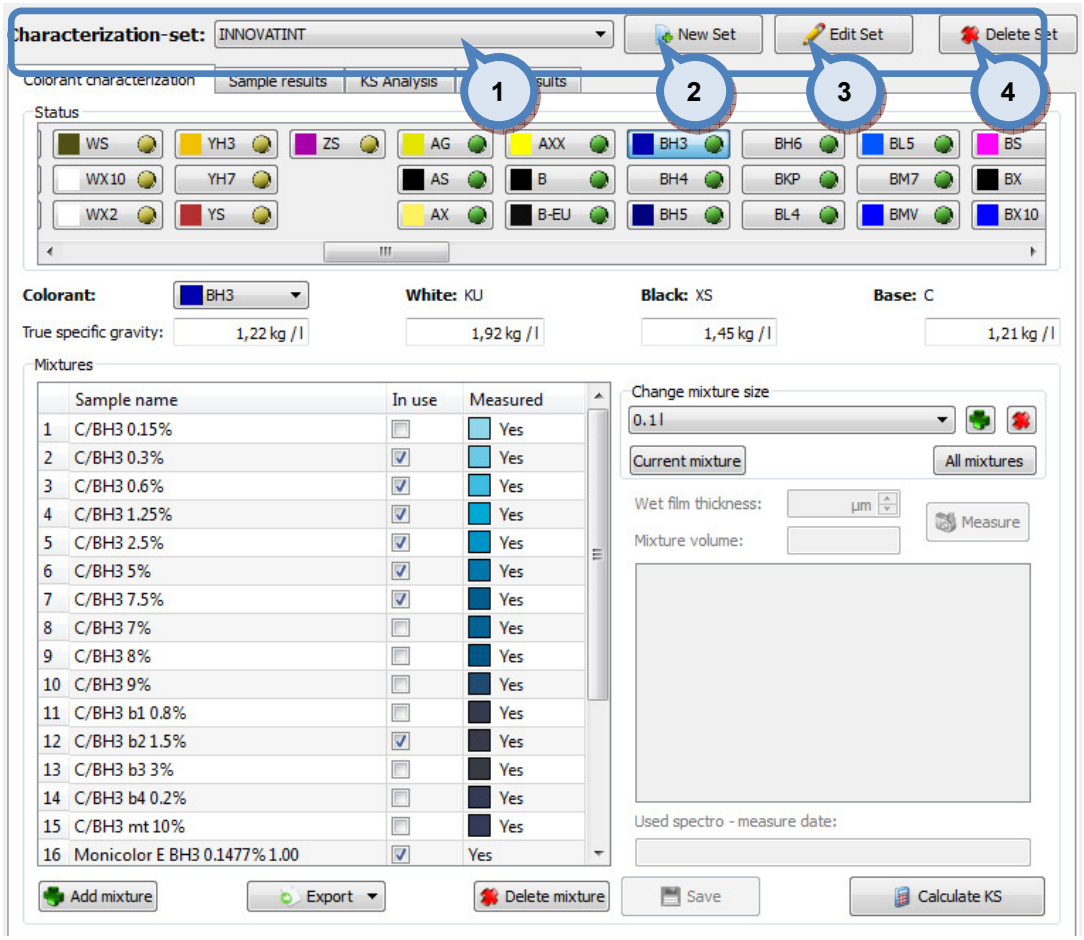
Del: The button to delete selected mixture in the selected template.

3.1.3 Colorants

On the colorants section you have 4 tab pages: Colorant characterization, Sample results, KS analysis, and Engine results.



In **all tab pages,** the following basic options are available:



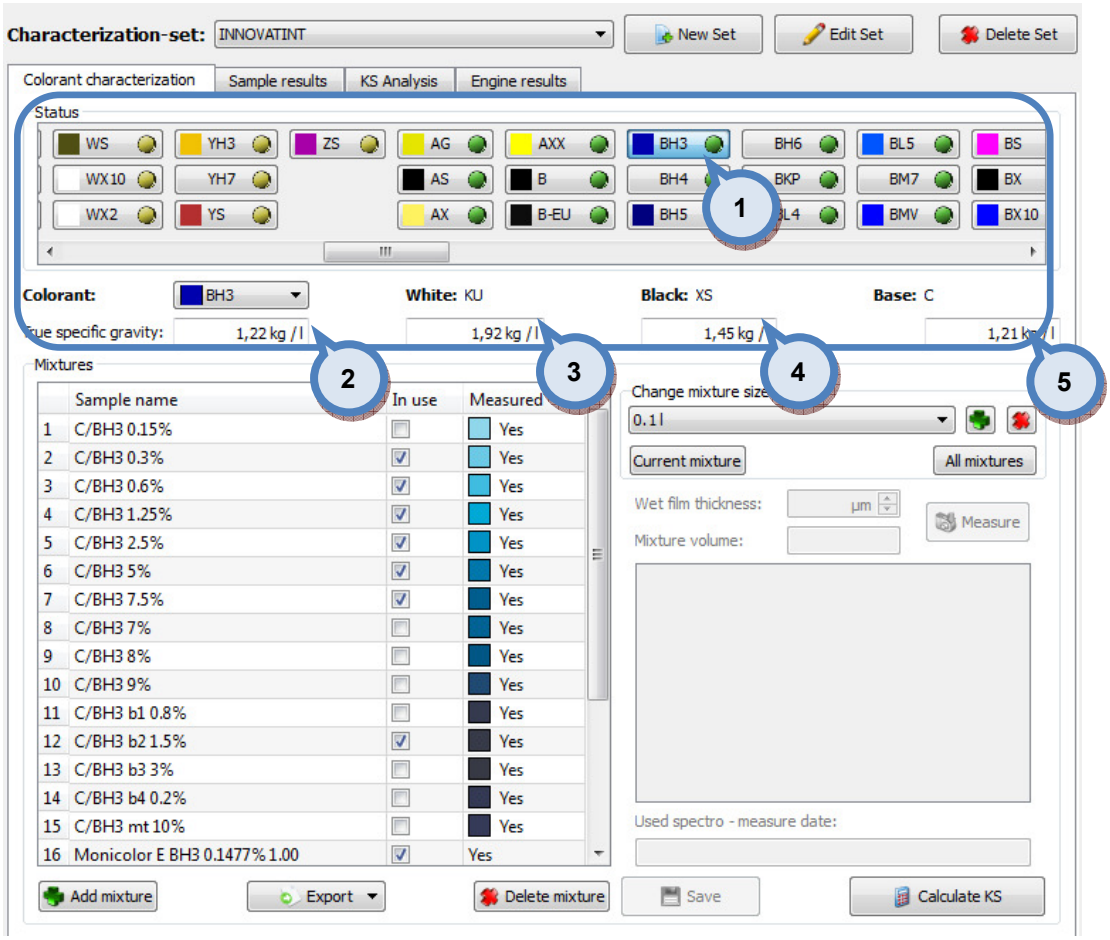
1.Characterization set: The drop down menu to select characterization set.

2.New Set: The button to create a new characterization set (name).

3.Edit Set: The button to edit a characterization set (name).

4.Delete Set: The button to delete a characterization set.

In **Colorant characterization** tab page of the **Colorants** page, the following options are available:



1.Status: The symbol table with status indicator (traffic lights).

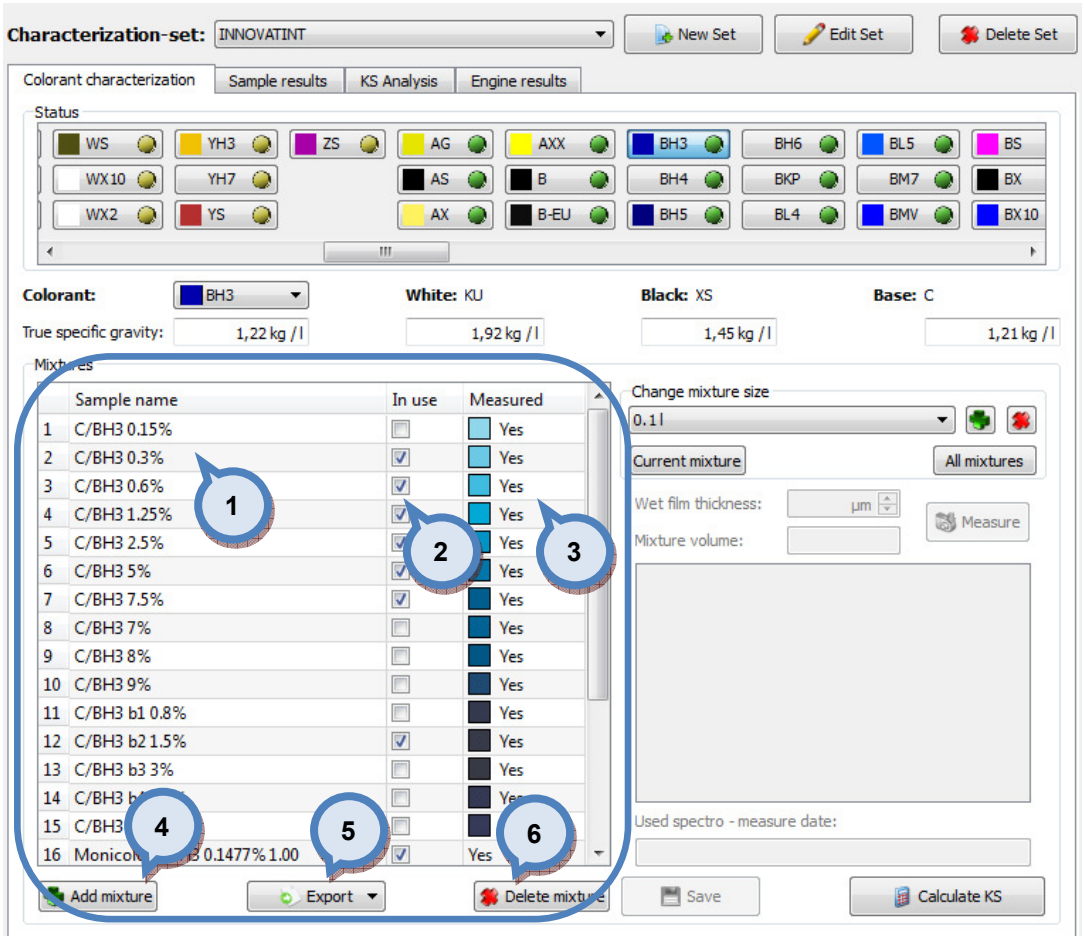
2.Colorant: The drop down menu to select colorant, and **True specific gravity** text field to enter real density used on characterization draw downs.

3.White: The indicator field for used characterization white and **True specific gravity** text field to enter real density used on characterization draw downs.

4.Black: The indicator field for used characterization black and **True specific gravity** text field to enter real density used on characterization draw downs.

5.Base: The indicator field for used characterization base and **True specific gravity** text field to enter real density used on characterization draw downs.

In the left hand side of the **Mixtures** section of the **Colorant characterization** tab page of the **Colorants** page, the following options are available:



1.Sample name: The table to show all mixtures based on colorant selection on the Colorant section.

2.In use: When the check box is enabled, selected mixture is used in the characterization.

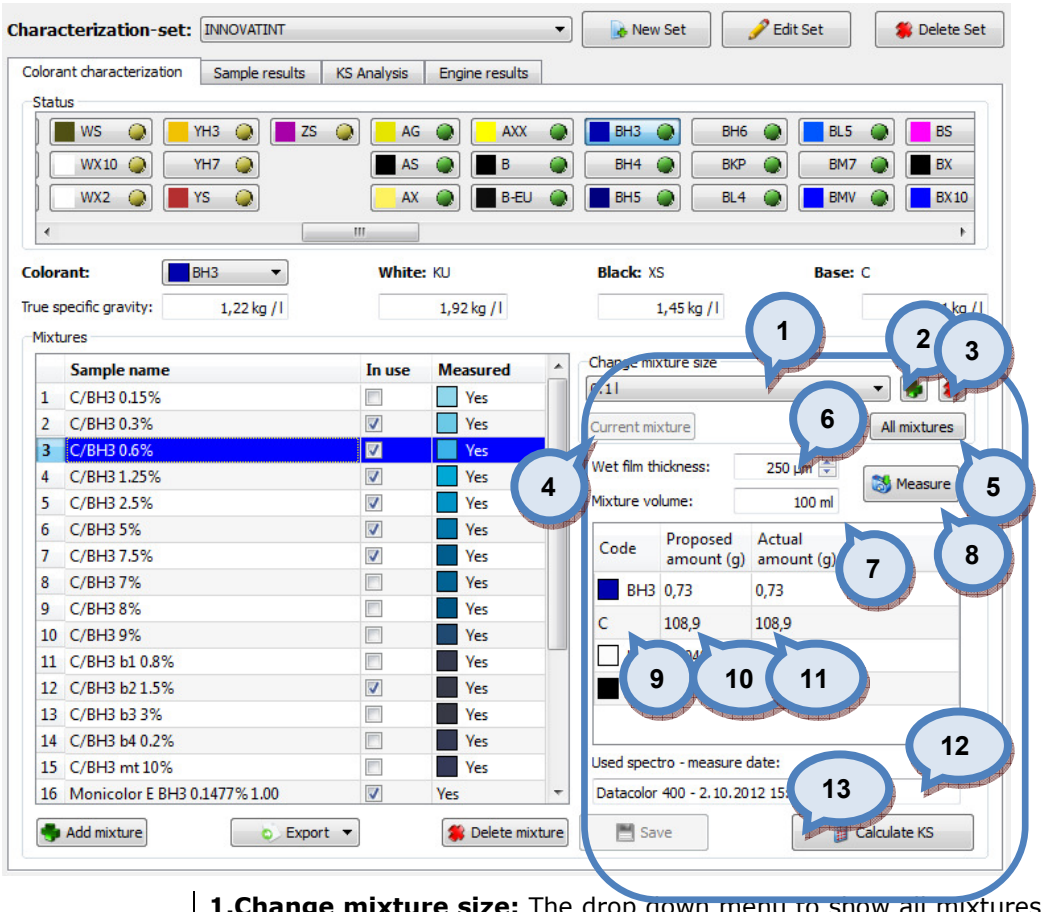
3.Measured: When Not measured text is visible, selected mixture is not measured. The text is chanced to Measured after measurement of this mixture is done.

4.Add mixture: The button to add a new mixture.

5.Export: The button to export mixture values into the text file or into the pdf file.

6.Delete mixture: The button to delete selected mixture.

In the right hand side of the **Mixtures** section of the **Colorant characterization** tab page of the **Colorants** page, when a mixture is selected from **Mixtures table**, the following options are available:



1.Change mixture size: The drop down menu to show all mixtures based on colorant selection on Colorant section.

2. : The button to add new mixture size.

3. : The button to delete selected mixture size.

4.Current mixture: The button to set can size settings for the selected mixture after changing can size from the drop down list (1).

5.All mixtures: The button to set can size settings for all of the mixtures after changing can size from the drop down list (1).

6.Wet film thickness: The selector to set used film thickness of the drawdowns.

7.Mixture volume: The text field to display total mixture volume in millilitres.

8.Measure: The button to measure selected mixture. This button is active when actual amounts are set into the field (11).

9.Code: The field to display component code of the mixture.

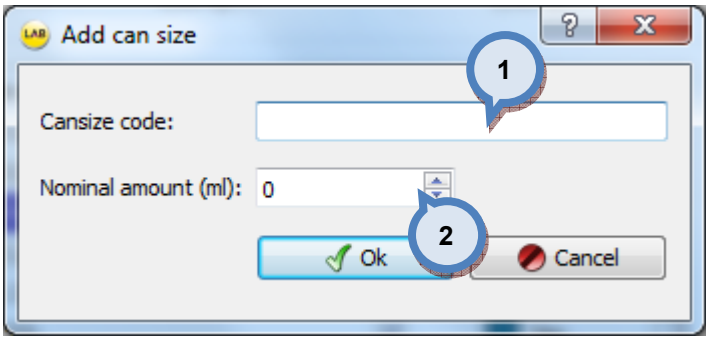
10.Proposed amount(g): The field to display component amount on proposed mixture.

11.Actual amount(g): the field to enter actual amount used on the mixture.

12.Used spectro – measure date: The field to display spectrophotometer model and date of measurement.

13.Calculate K/S: The button to calculate K/S values (drawdown measurements needs to be done to activate this button.)

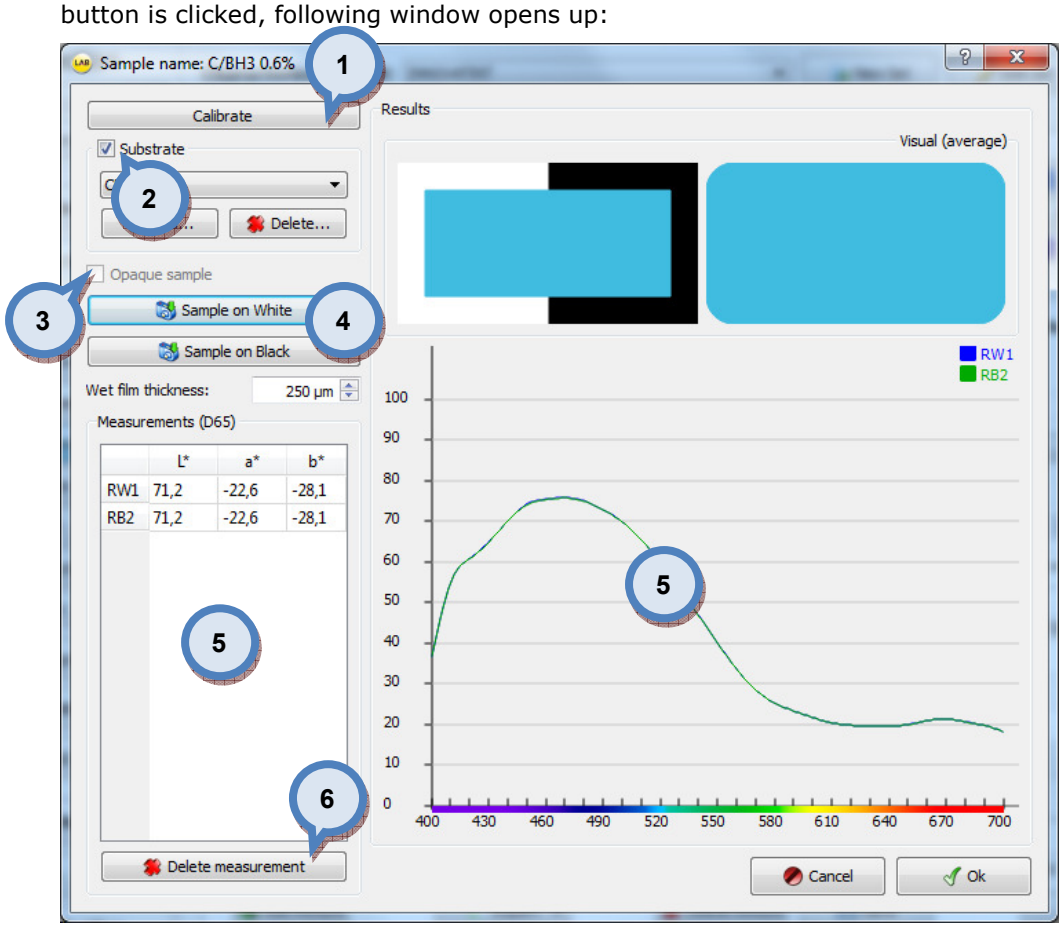
When the button is clicked, following window opens up:



1.Cansize code: The text field to enter the code or the name for the can size.

2.Nominal amount (ml): The selector to set total volume of the can.

When **mixture is selected** and **actual amount for base paint** is entered, and **Measure** button is clicked, following window opens up:



1.Calibrate: The button to calibrate the spectrophotometer.

2.Subsrate The check box to enable substrate selector section.

3.Opaque sample: When check box is enabled, drawdown is treated as fully hiding, and measurement over white substrate is required (the Sample on white button is enabled). When the check box is not enabled, the draw down is treated as translucent and measurements over both white and black are required (the Sample on white and the Sample on black buttons are enabled).

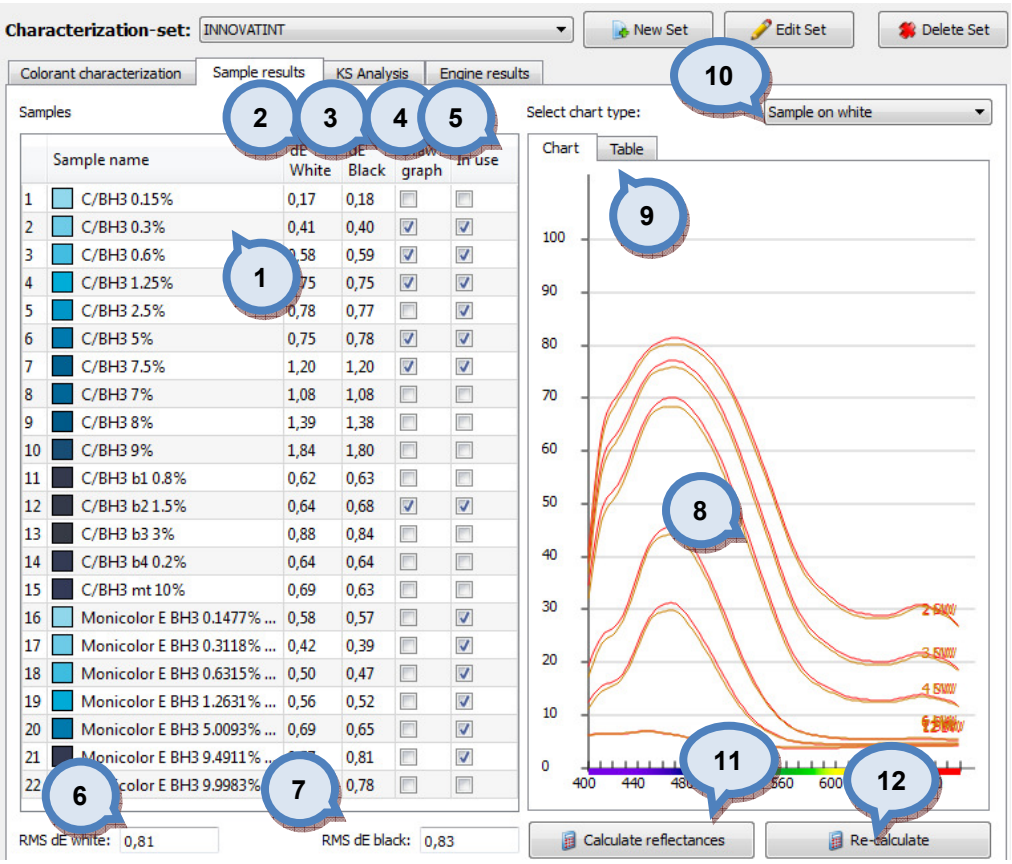
4.Measure buttons: The buttons to measure drawdowns with the spectrophotometer.

5.Results: The colour box and the graph to visualize measurements.

6.Delete measurement: The button to delete selected measurement from the list (4).

In the Sample results tab page, the actual measurements are presented against the theoretical reflectance values that are calculated backwards from the KS data.

In the **Sample results** section, the following options are available:



1.Samples: The table to display mixtures.

2.dE White: Sample measurement over white substrate vs. theoretical measurement

3.dE Black: Sample measurement over black substrate vs. theoretical measurement

4.Draw graph: Items to be displayed

5.In use: Items used in calculations (to define KS-values)

6.RMS dE white: 'Root mean square' of white measurement vs. theoretical measurements

7.RMS dE black: 'Root mean square' of white measurement vs. theoretical measurements

8.Sample reflectance(real/theoretical): Selected sample reflectance displayed.

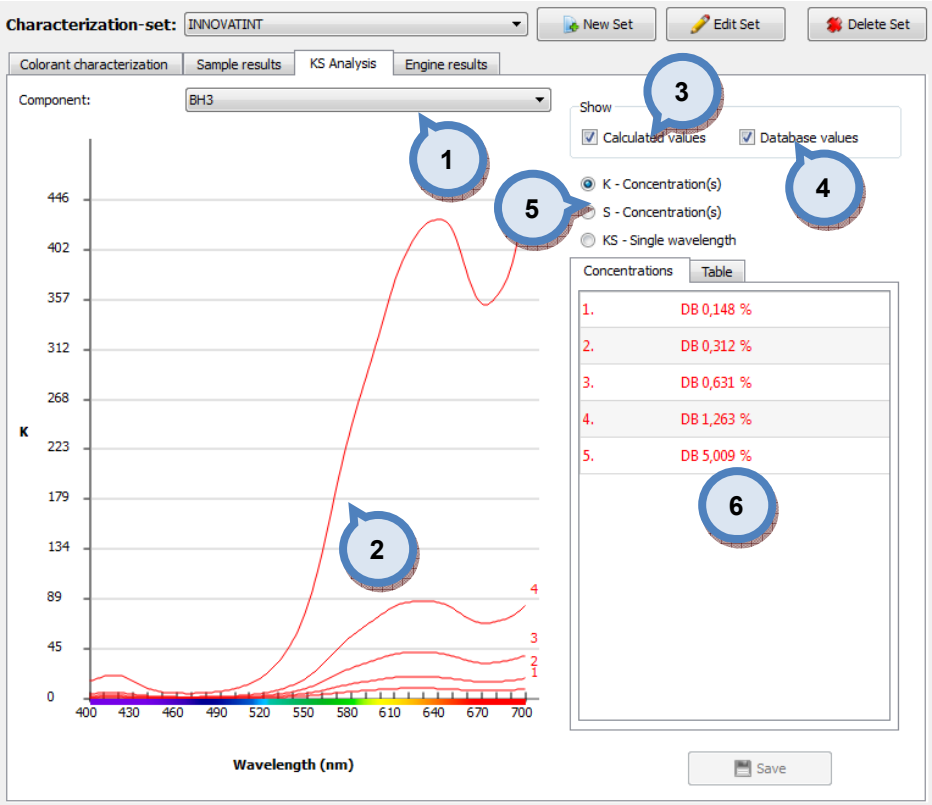
9.Select chart type: The chart or table display of the measured mixtures.

10.Information type: Dropdown list to select type of information shown below. Options are; sample on white, sample on black and sample on white/black.

11.Calculate reflections: The button to calculate reflectance values.

12.Re-calculate: The button to re-calculate reflectance values for display only. This does not overwrite previous calculation values.

In the **KS Analysis** section, the following options are available:



1.Component: The drop down list to select the component to display.

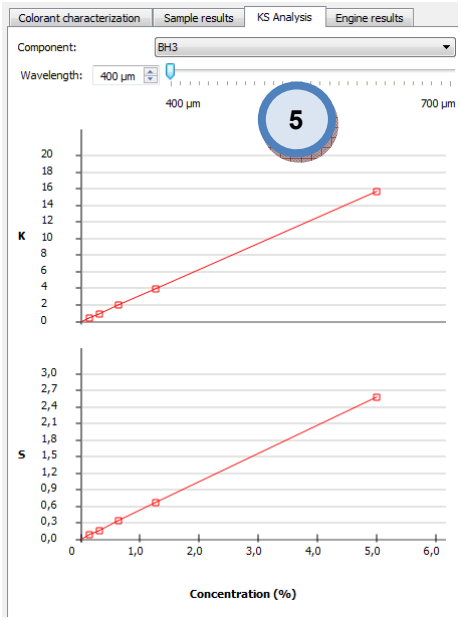
2.Table: The chart display of the measured mixtures.

3.Calculated values: When check box is enabled calculated values are showed on chart.

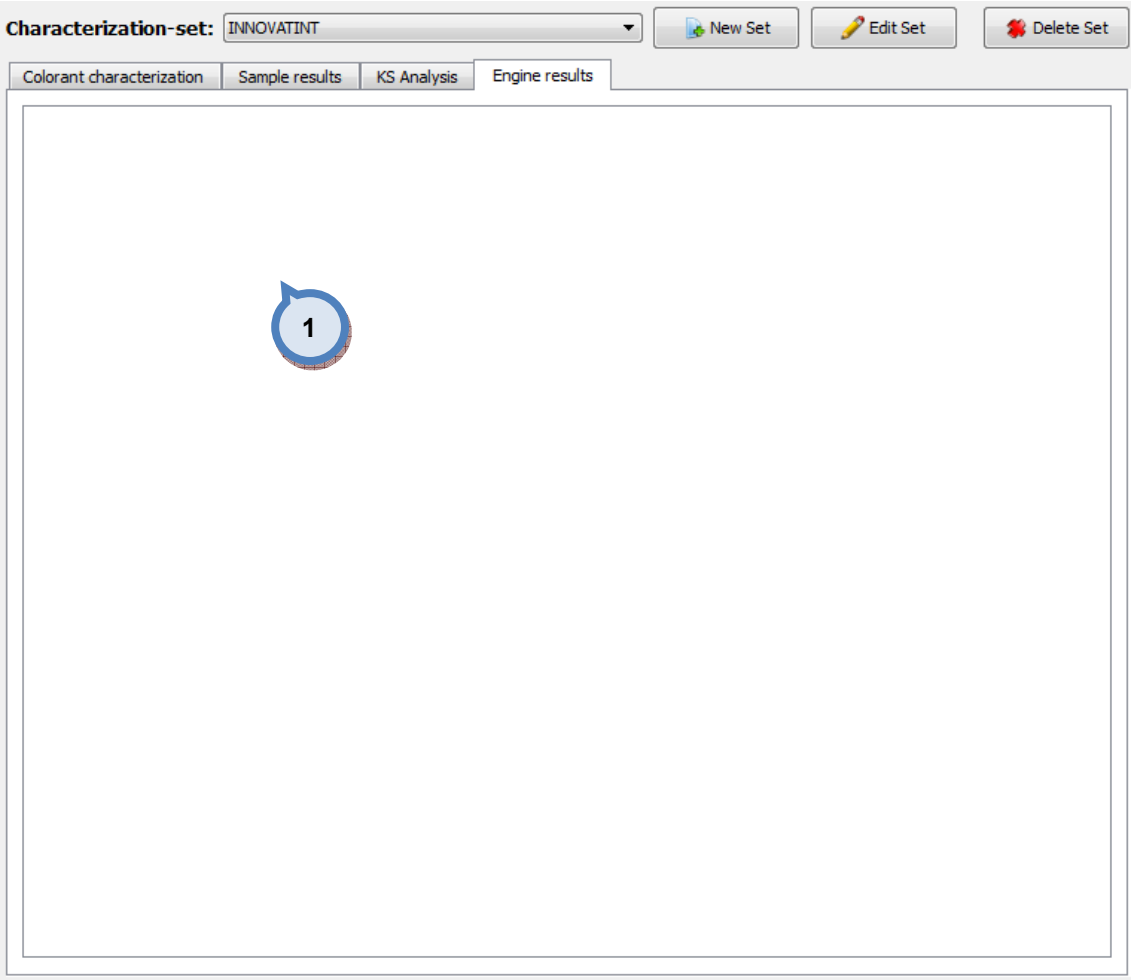
4.Database values: When check box is enabled database values are showed on chart. The database values exist when previous characterization data is available in the database.

5.K, S, KS: The radio buttons to select which component is showed on the graph. If KS single wavelength is selected, wavelength can be changed from the selector on the right.

6.Concentrations/Table: The table to display mixture information.



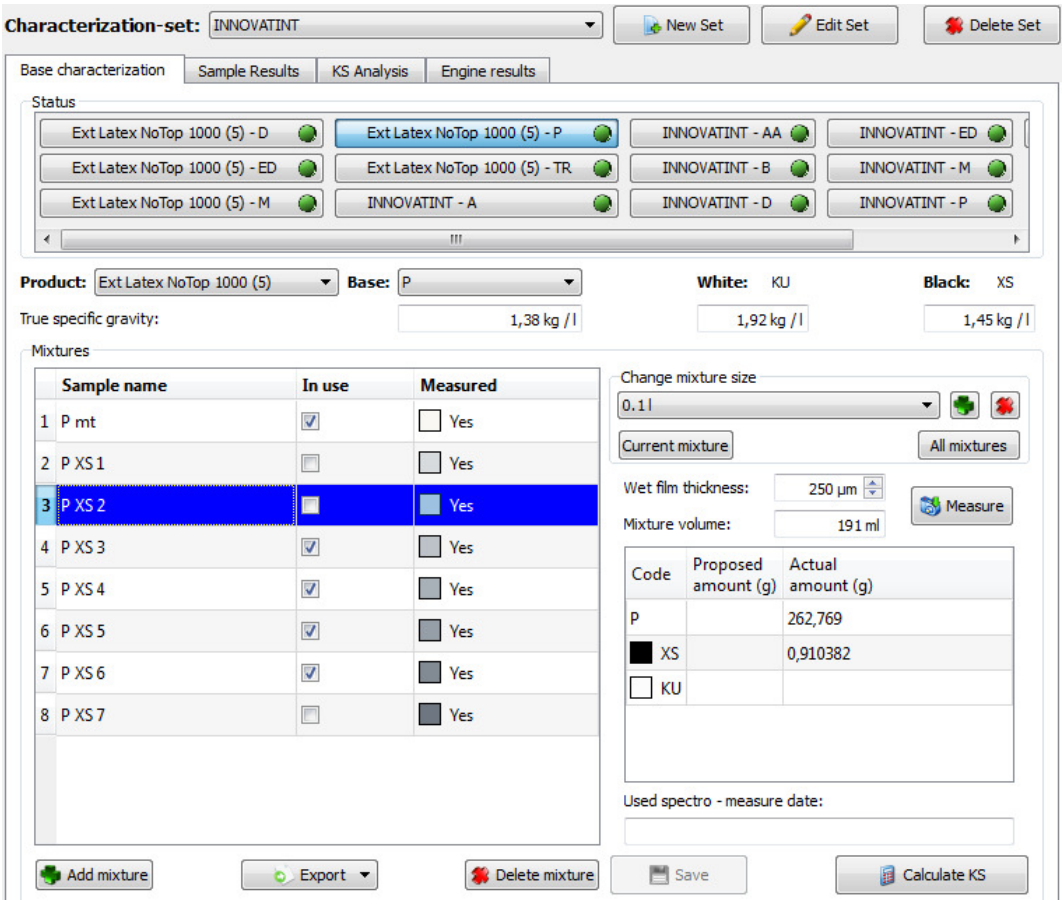
In the **Engine results** section, the following options are available:



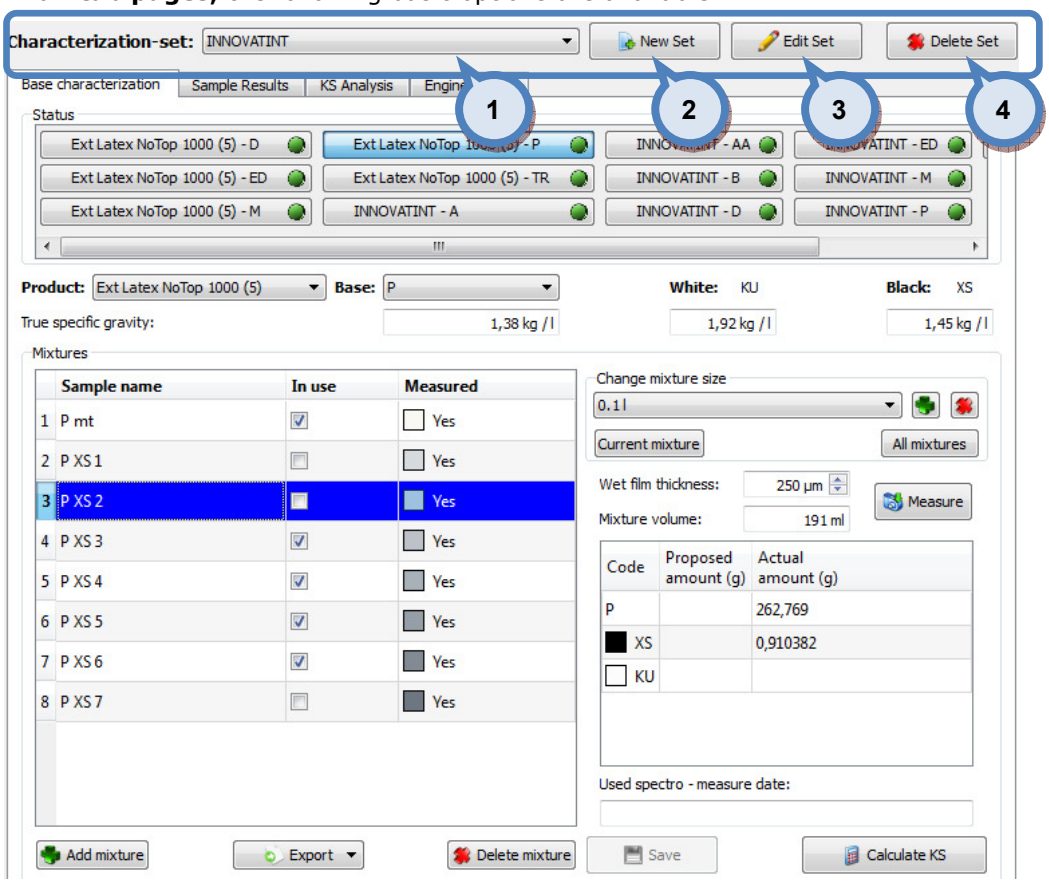
1.The text field to display the log file of the characterization engine.

3.1.4 Bases

In the **Bases** section you have 4 tab pages: base characterization, Sample results, KS analysis, and Engine results.



In **all tab pages,** the following basic options are available:



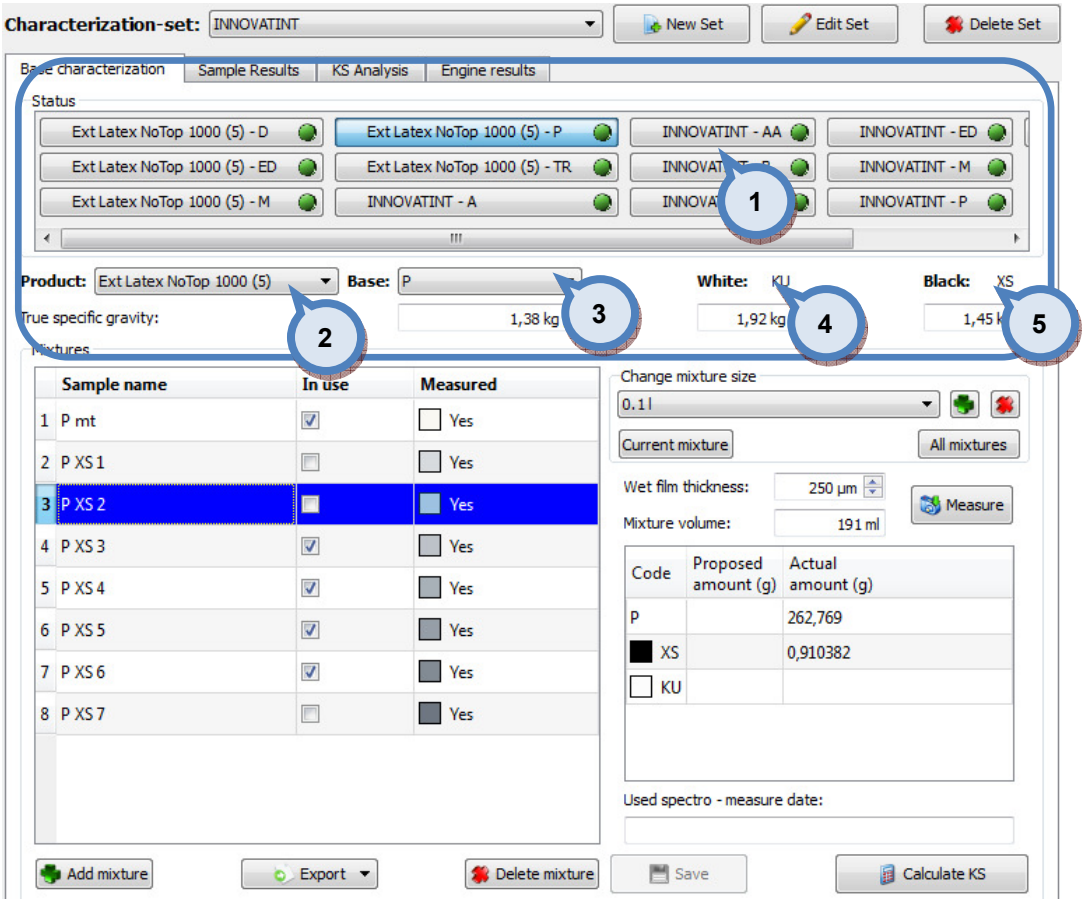
1.Characterization set: The drop down menu to select characterization set.

2.New Set: The button to create a new characterization set (name).

3.Edit Set: The button to edit a characterization set (name).

4.Delete Set: The button to delete a characterization set.

In the **Base characterization** tab page, the following options are available:



1.Status: The symbol table with status indicator (traffic lights).

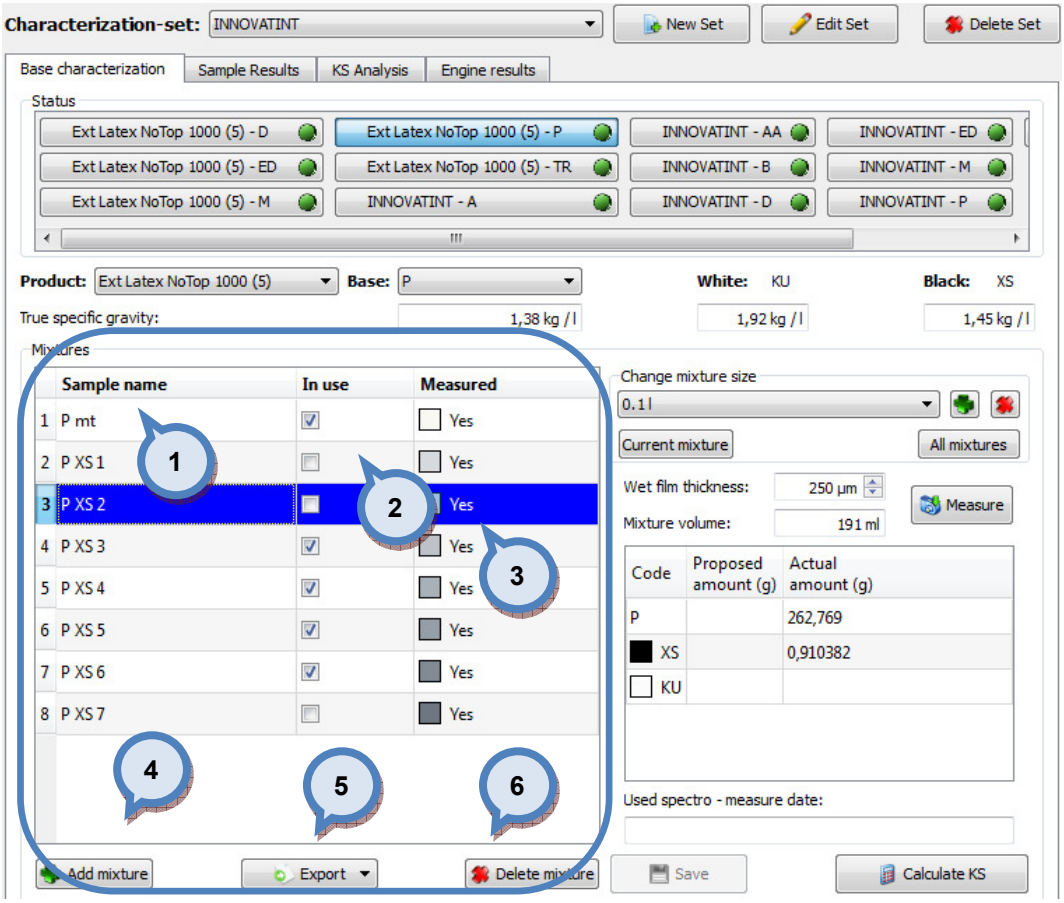
2.Product: The drop down menu to select the product, and **True specific gravity** text field to enter real density used on characterization draw downs.

3.Base: The drop down menu to select the base, and **True specific gravity** text field to enter real density used on characterization draw downs

4.White: The indicator field for used characterization white and **True specific gravity** text field to enter real density used on characterization draw downs.

5.Black: The indicator field for used characterization black and **True specific gravity** text field to enter real density used on characterization draw downs.

In the left hand side of the **Mixtures** section, the following options are available:



1.Sample name: The table to show all mixtures based on colorant selection on the Colorant section.

2.In use: When check box is enabled, selected mixture is used on the characterization.

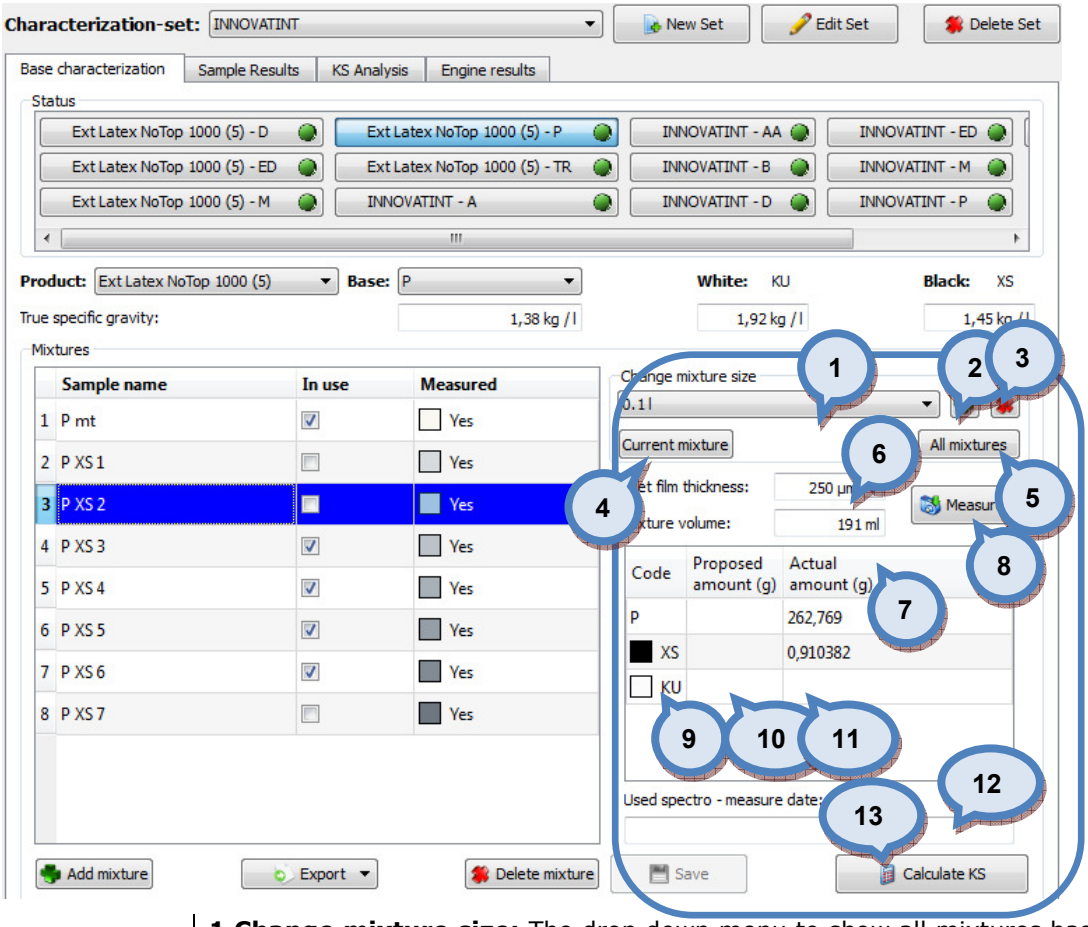
3.Measured: When Not measured text visible, selected mixture is not measured.

4.Add mixture: The button to add a new mixture.

5.Export: The button to export mixture values.

6.Delete mixture: The button to delete selected mixture.

In the right hand side of the **Mixtures** section, the following options are available:



1.Change mixture size: The drop down menu to show all mixtures based on colorant selection on Colorant section.

2. : The button to add new mixture size.

3. **:** The button to delete selected mixture size.

4.Current mixture: The button to set settings for selected mixture.

5.All mixtures: The button to set settings for all mixtures.

6.Wet film thickness: The selector to set used film thickness of the draw downs.

7.Mixture volume: The text field to display total mixture volume (?)

8.Measure: The button to measure selected mixture.

9.Code: The field to display component code of the mixture.

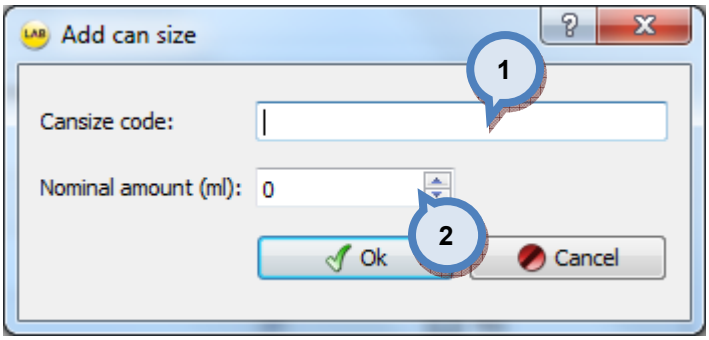
10.Proposed amount(g): The field to display component amount on proposed mixture.

11.Actual amount(g): the field to enter actual amount used on the mixture.

12.Used spectro – measure date: The field to display spectrophotometer model and date of measurement.

13.Calculate K/S: The button to calculate K/S values (drawdown measurements needs to be done to activate this button.)

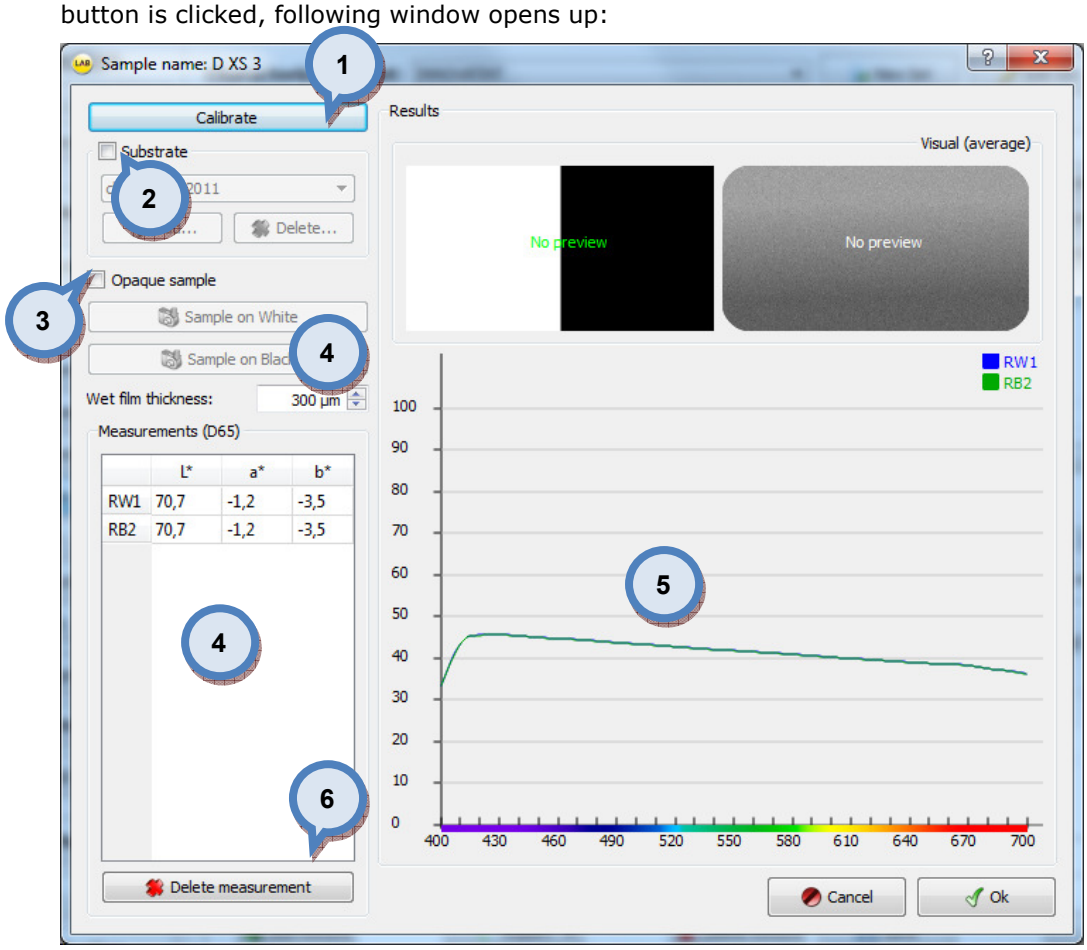
When the button is clicked, following window opens up:



1.Cansize code: The text field to enter the code or the name for the can size.

2.Nominal amount (ml): The selector to set total volume of the can.

When **mixture is selected** and **actual amount for base paint** is entered, and **Measure** button is clicked, following window opens up:



1.Calibrate: The button to calibrate the spectrophotometer.

2.Subsrate The check box to enable substrate selector section.

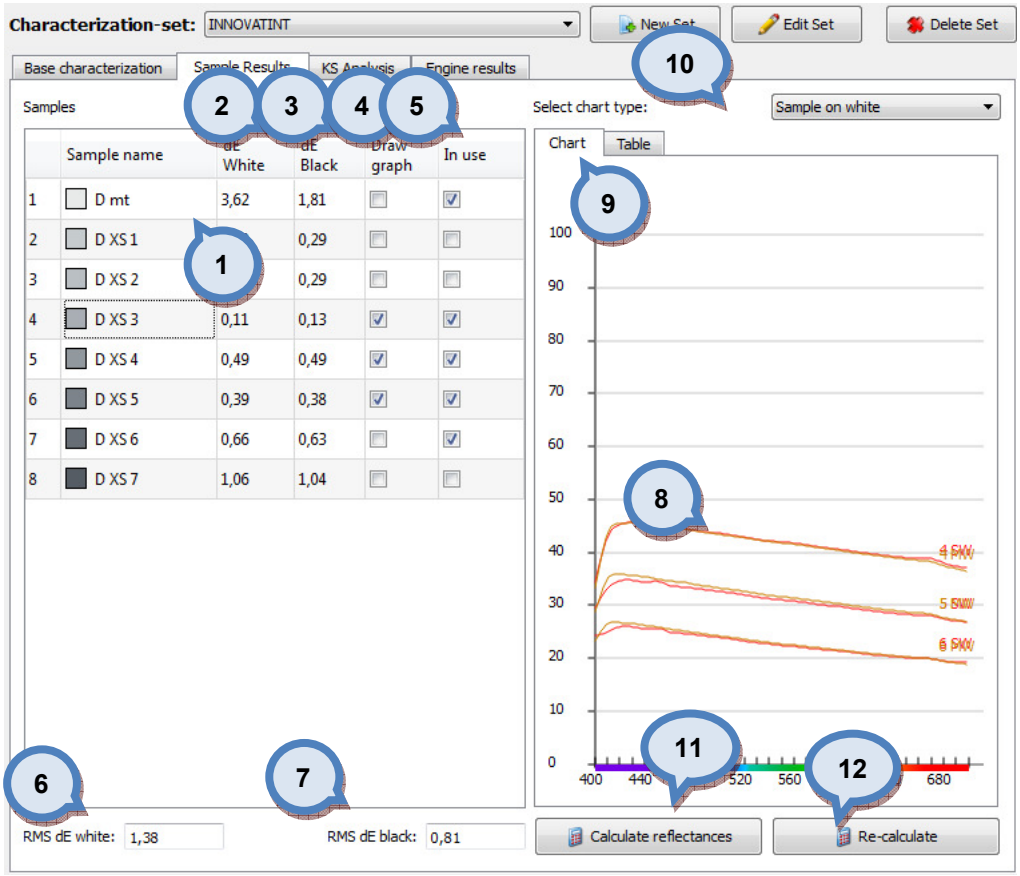
3.Opaque sample: When check box is enabled, drawdown is treated as fully hiding, and measurement over white substrate is required (the Sample on white button is enabled). When the check box is not enabled, the draw down is treated as translucent and measurements over both white and black are required (the Sample on white and the Sample on black buttons are enabled).

4.Measure buttons: The buttons to measure draw downs with the spectrophotometer.

5.Results: The colour box and the graph to visualize measurements.

6.Delete measurement: The button to delete selected measurement from the list (4).

In the **Sample results** section, the following options are available:



1.Samples: The table to display mixtures.

2.dE White: Sample measurement over white substrate vs. theoretical measurement

3.dE Black: Sample measurement over black substrate vs. theoretical measurement

4.Draw graph: Items to be displayed

5.In use: Items used in calculations (to define KS-values)

6.RMS dE white: 'Root mean square' of white measurement vs. theoretical measurements

7.RMS dE black: 'Root mean square' of white measurement vs. theoretical measurements

8.Sample reflectance(real/theoretical): Selected sample reflectance displayed.

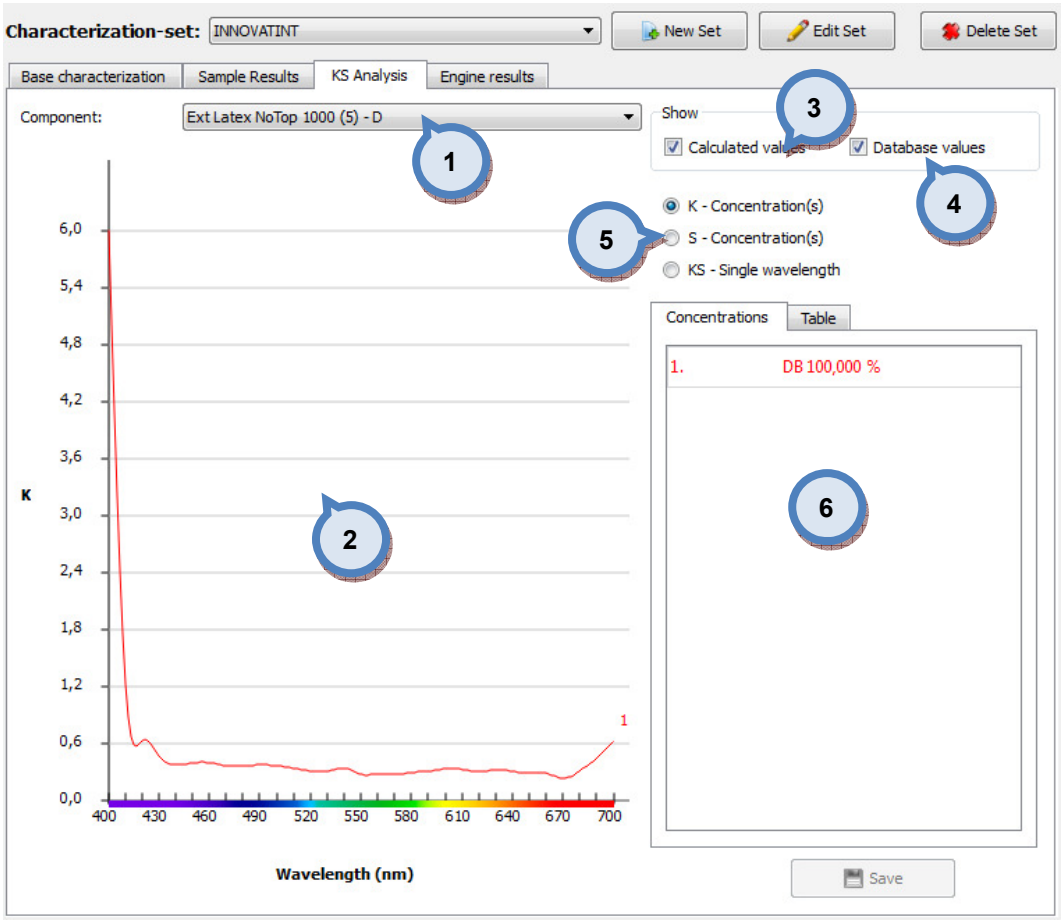
9.Select chart type: The chart or table display of the measured mixtures.

10.Information type: Dropdown list to select type of information shown below. Options are; sample on white, sample on black and sample on white/black.

11.Calculate reflections: The button to calculate reflectance values.

12.Re-calculate: The button to re-calculate reflectance values for display only. This does not overwrite previous calculation values.

In the **KS Analysis** section, the following options are available:



1.Component: The drop down list to select system.

2.Table: The chart display of the measured mixtures.

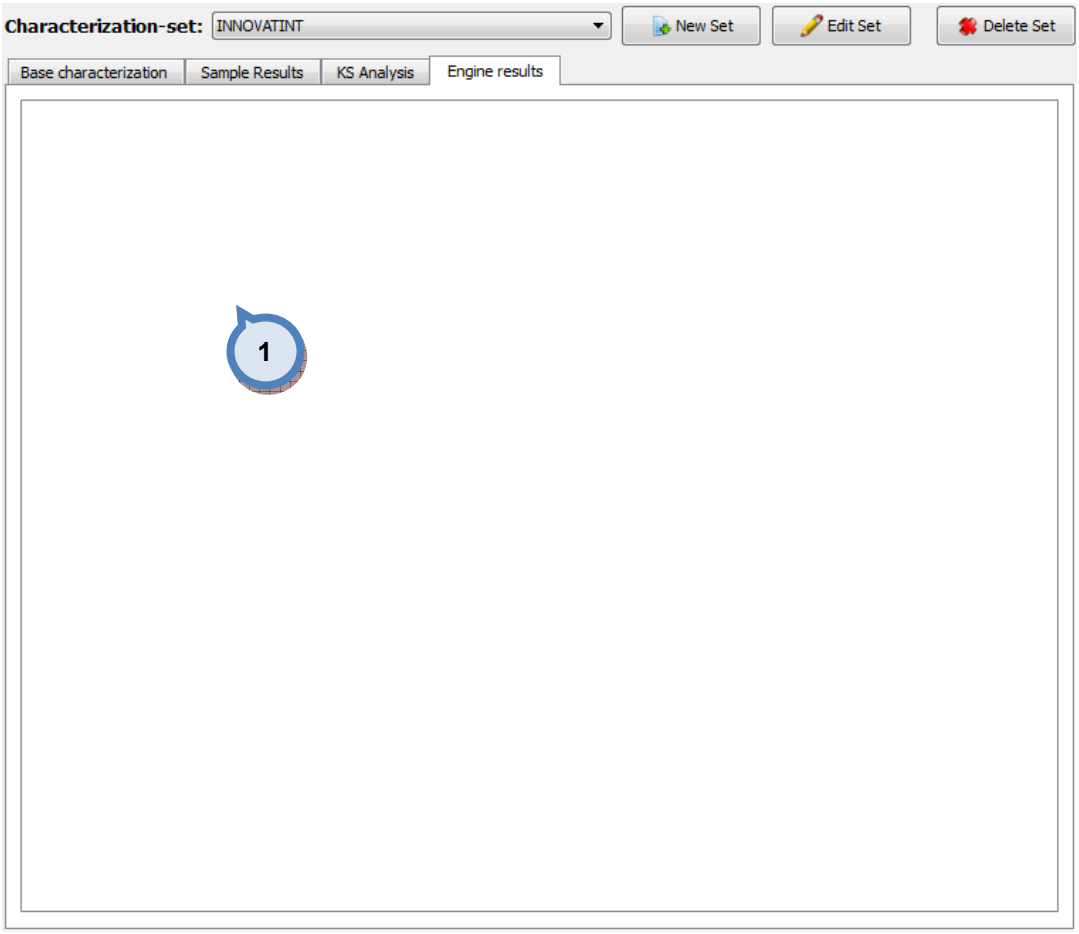
3.Calculated values: When check box is enabled calculated values are showed on chart.

4.Database values: When check box is enabled database values are showed on chart. The database values exist when previous characterization data is available in the database.

5.K, S, KS: The radio buttons to select which component is showed on the graph. If KS single wavelength is selected, wavelength can be changed from the selector on the right.

6.Concentrations/Table: The table to display mixture information.

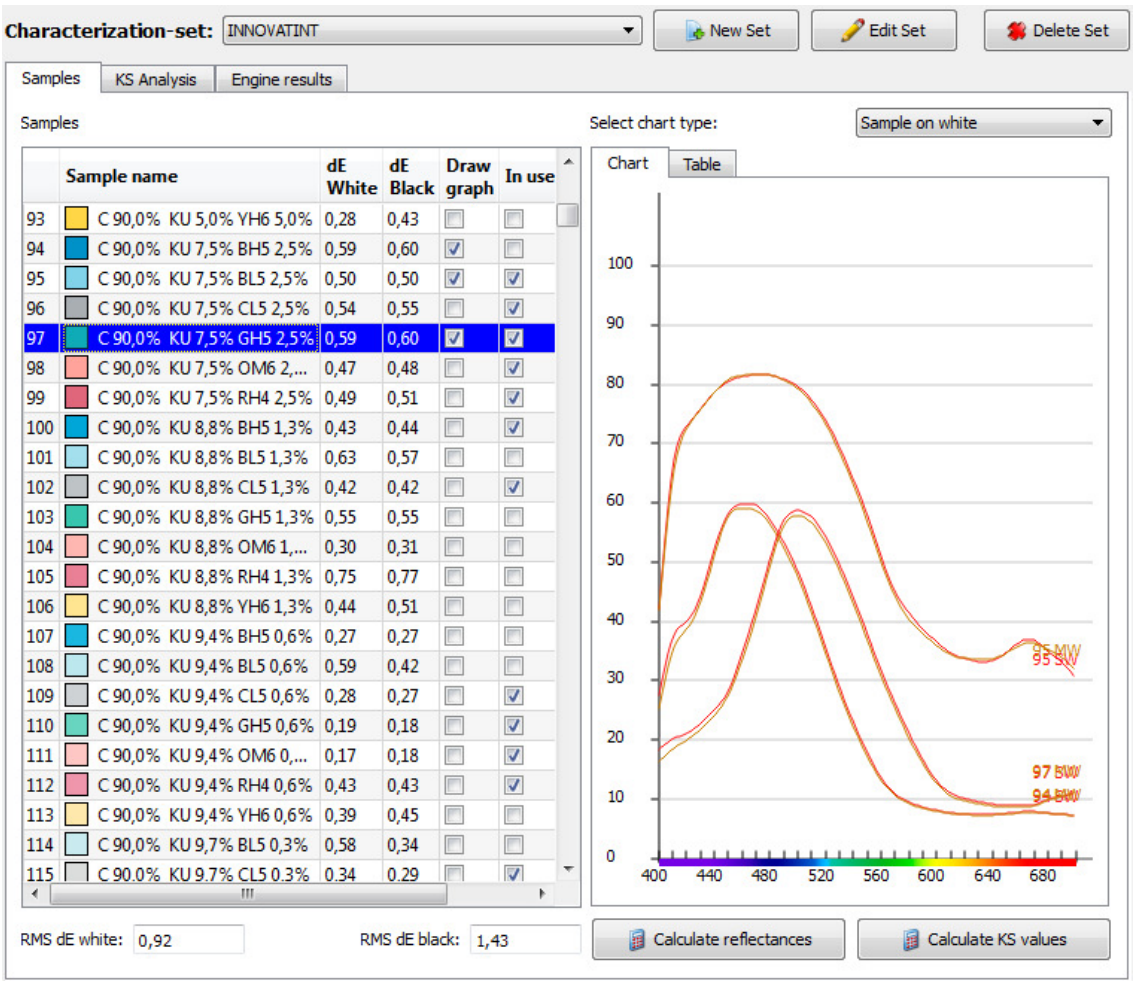
In the **Engine results** section, the following options are available:



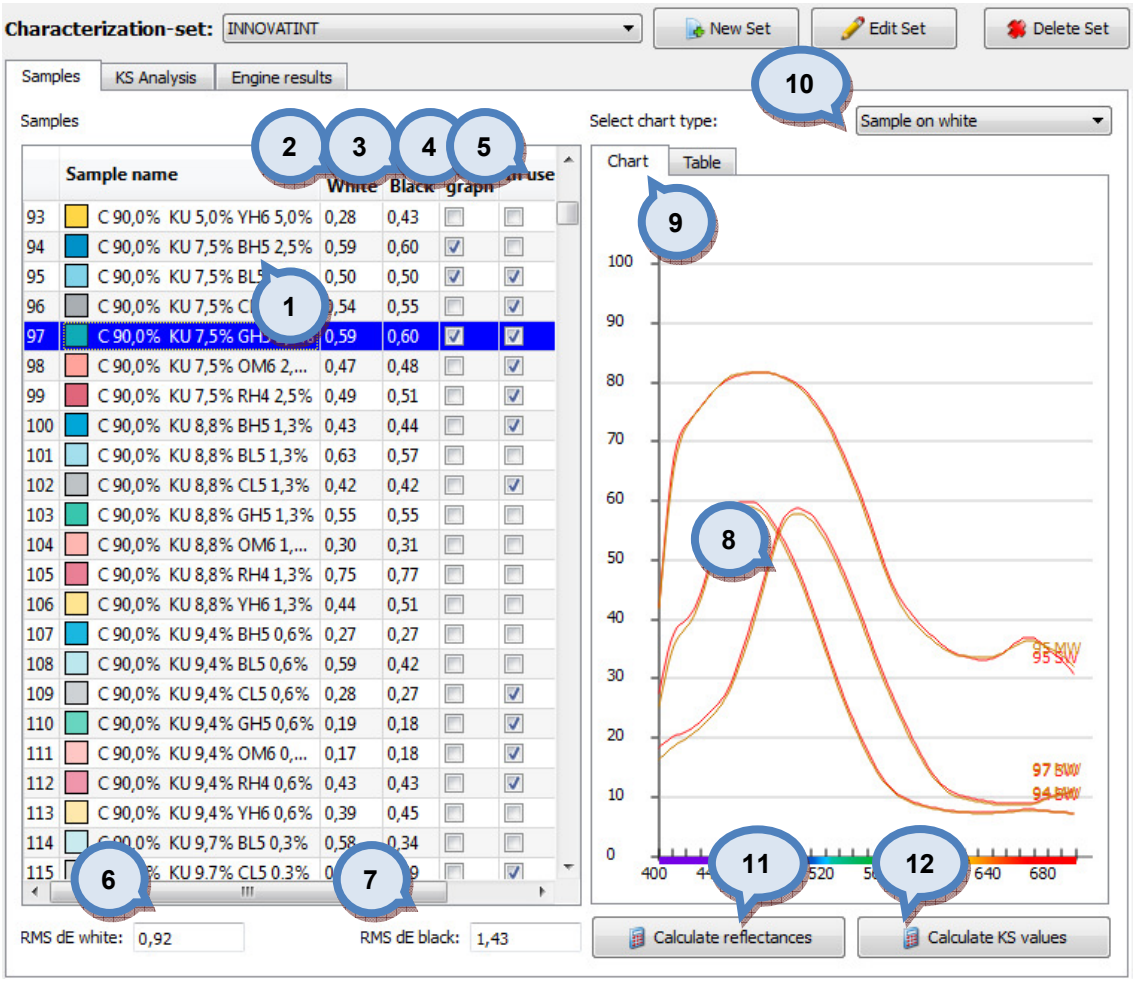
1.The text field to display the log file of the characterization engine.

3.1.5 All

In the **All** section you have 3 tab pages: Samples, KS analysis, and Engine results. In this section you can view all component measured at the same time. You can calculate reflectance values on this page, but new measurements you need to do in the previous sections for colorants, and base paints. It is possible to calculate KS-values to all components in the selected set.



In the **Samples** section, the following options are available:



1.Samples: The table to display mixtures.

2.dE White: Sample measurement over white substrate vs. theoretical measurement

3.dE Black: Sample measurement over black substrate vs. theoretical measurement

4.Draw graph: Items to be displayed

5.In use: Items used in calculations (to define KS-values)

6.RMS dE white: 'Root mean square' of white measurement vs. theoretical measurements

7.RMS dE black: 'Root mean square' of white measurement vs. theoretical measurements

8.Sample reflectance(real/theoretical): Selected sample reflectance displayed.

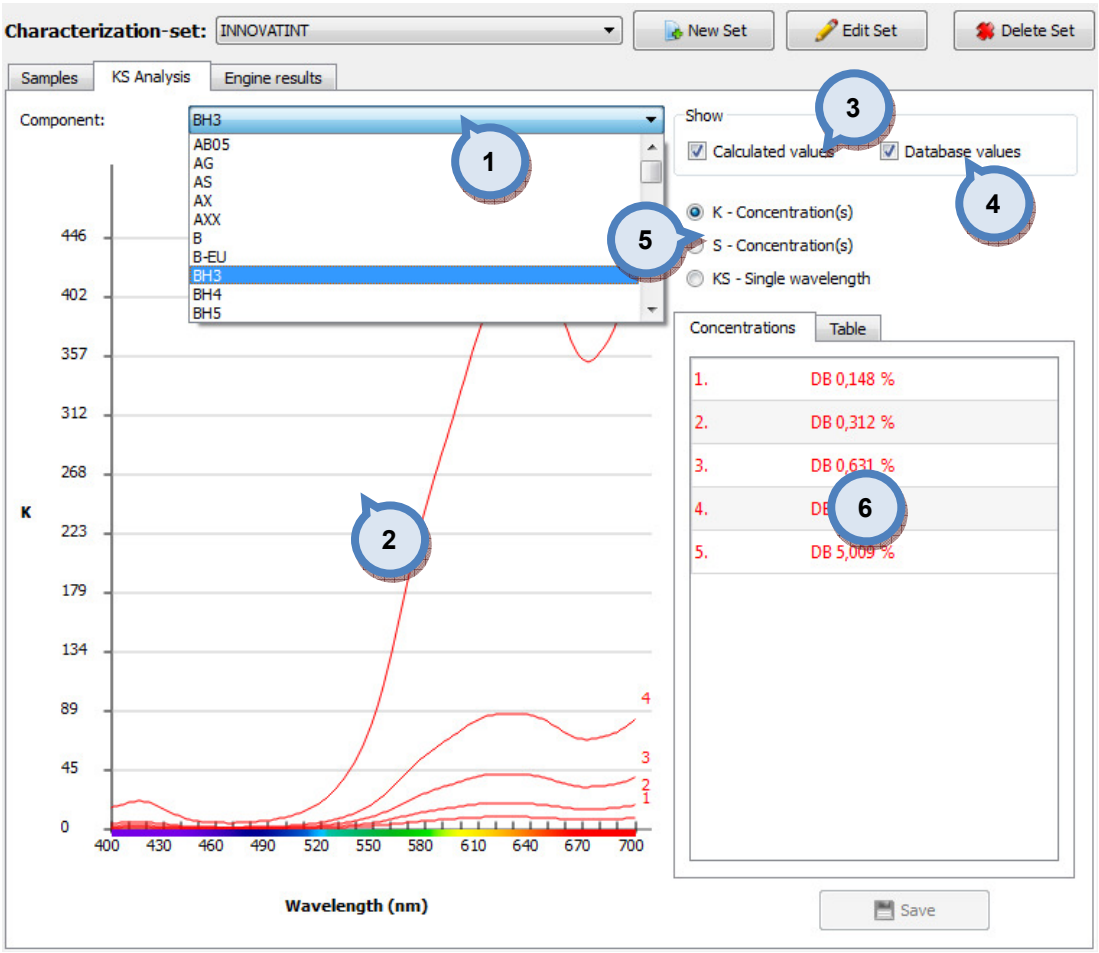
9.Select chart type: The chart or table display of the measured mixtures.

10.Information type: Dropdown list to select type of information shown below. Options are; sample on white, sample on black and sample on white/black.

11.Calculate reflectances: The button to calculate reflectance values.

12.Calculate KS values: The button to calculate KS values.

In the **KS Analysis** section, the following options are available:



1.Component: The drop down list to select component. all components in the characterization set is present.

2.Table: The chart display of the measured mixtures.

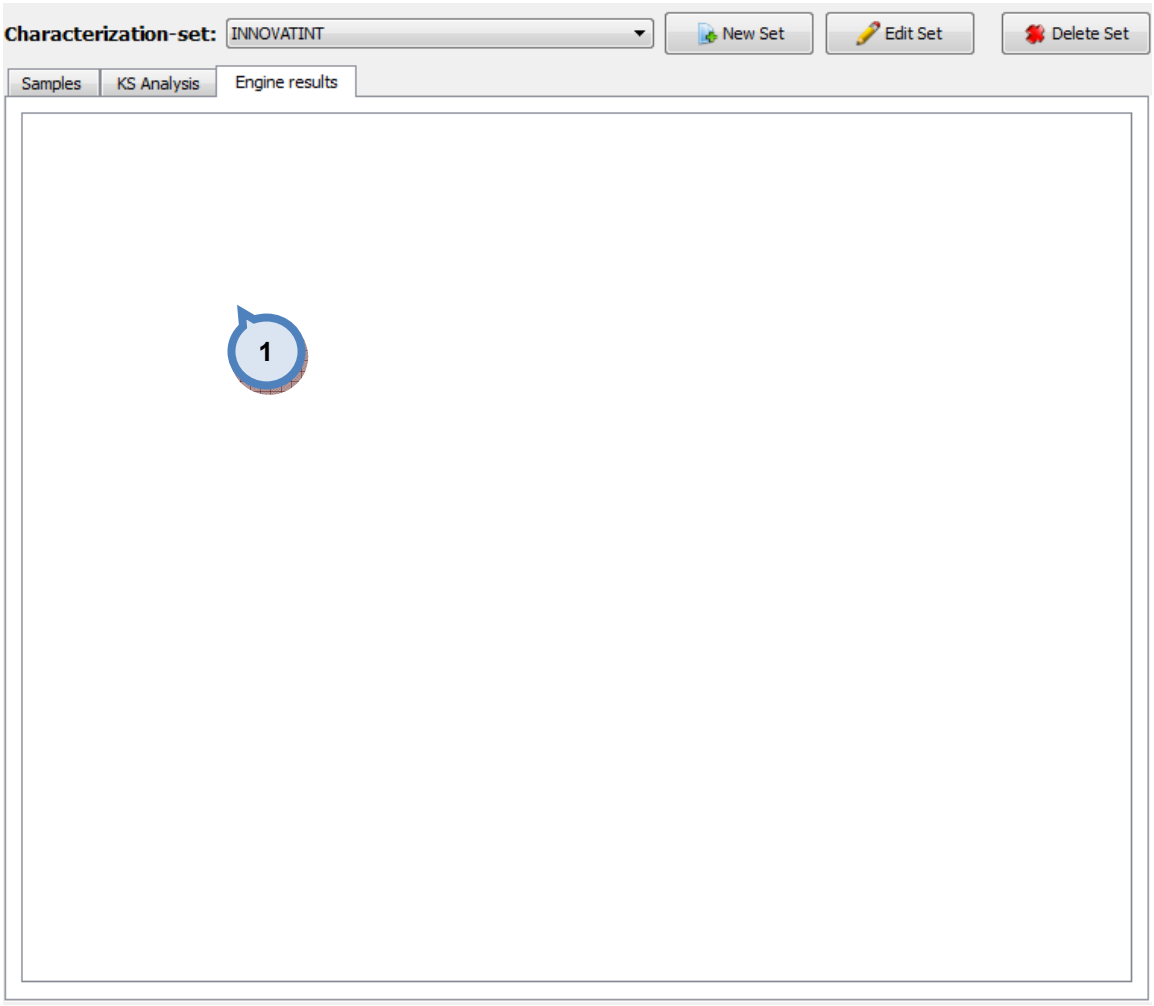
3.Calculated values: When check box is enabled calculated values are showed on chart.

4.Database values: When check box is enabled database values are showed on chart. The database values exist when previous characterization data is available in the database.

5.K, S, KS: The radio buttons to select which component is showed on the graph. If KS single wavelength is selected, wavelength can be changed from the selector on the right.

6.Concentrations/Table: The table to display mixture information.

In the **Engine results** section, the following options are available:

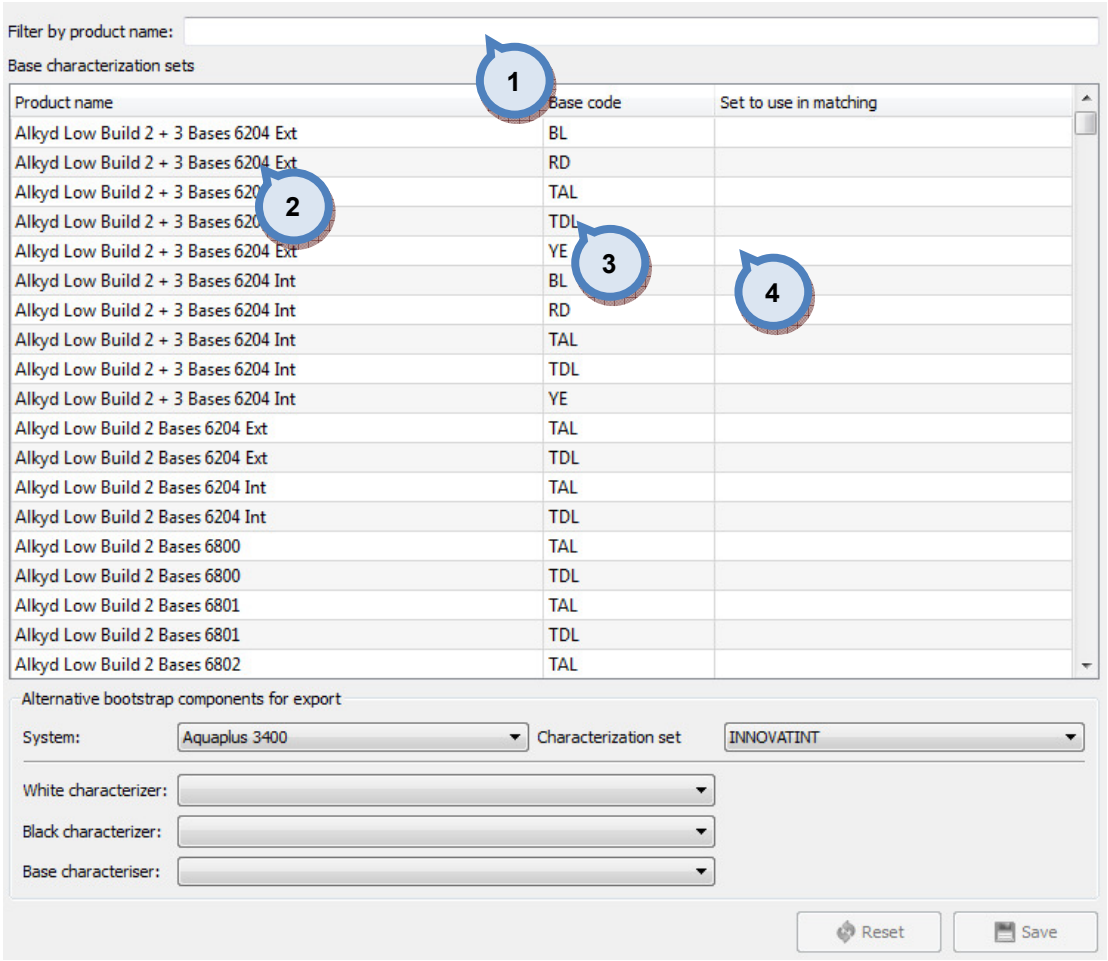


1.The text field to display the log file of the characterization engine.

3.1.6 Base character set

When the system you like to export, has not been characterized with the white and black colorant included in this system, you can use Base character set page, to create a such a system. This function will use white and black colorant in the system, and it will then allow matching function to work properly, even if the original characterization is made with other white and black colorant.

In the **Base character set** page, you have the following options available:



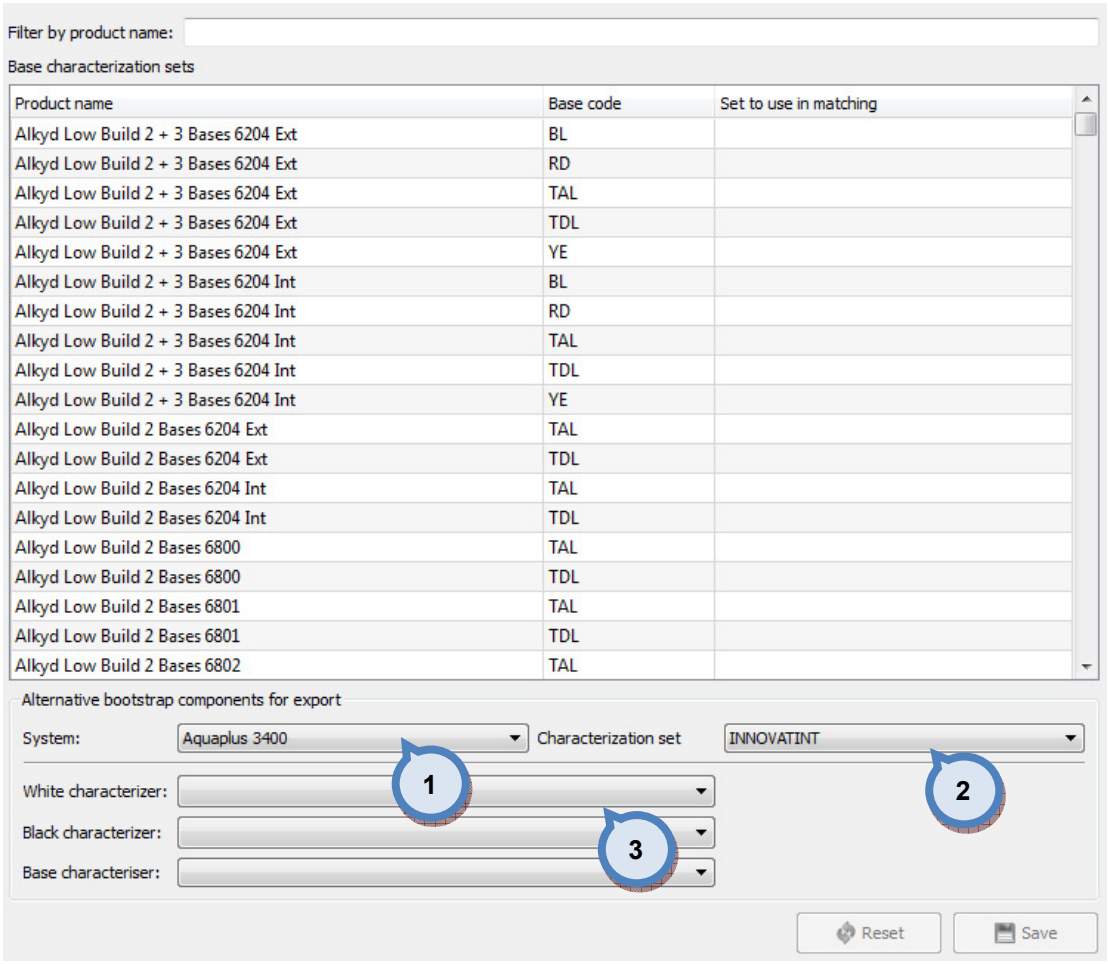
1.Filter by product name: The text field to filter the product (2) by typing the name of the product or a part of the name.

2.Product name: The list of the products.

3.Base code: The base paint code of the products.

4.Set to use in matching: The drop down list to select which characterization set is used when making matching with this product.

In the **Alternative bootstrap components for export** section of the **Base character set** page, you have the following options available:



1.System: The drop down list to select a system.

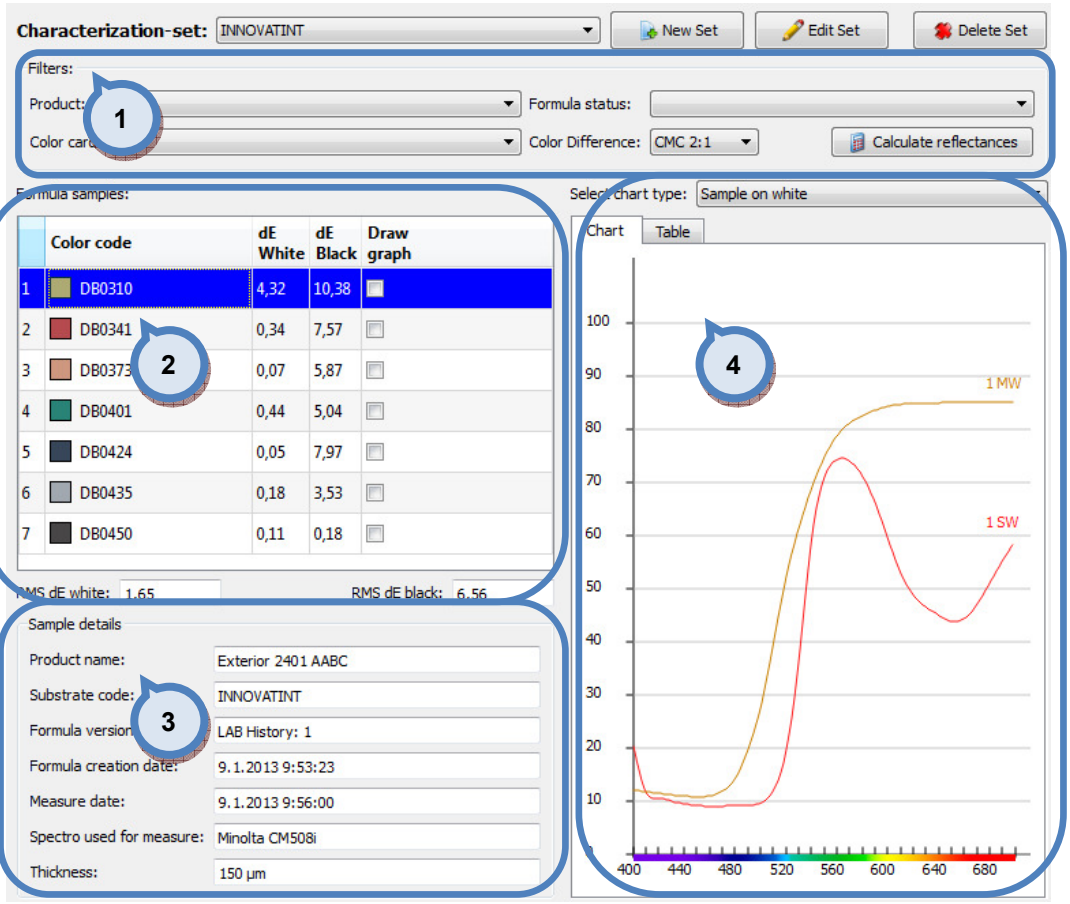
2.Characterization set: The drop down list to select a characterization set.

3.Chacterization components: The drop down list to select a white, black, and base characterizers (that are included in the system you are exporting).

3.1.7 Test

In the **Test** area it is possible to check characterization efficiency against real drawdowns used to match colors.

Pages is divided into four areas; filters, formula samples, sample details and chart area.



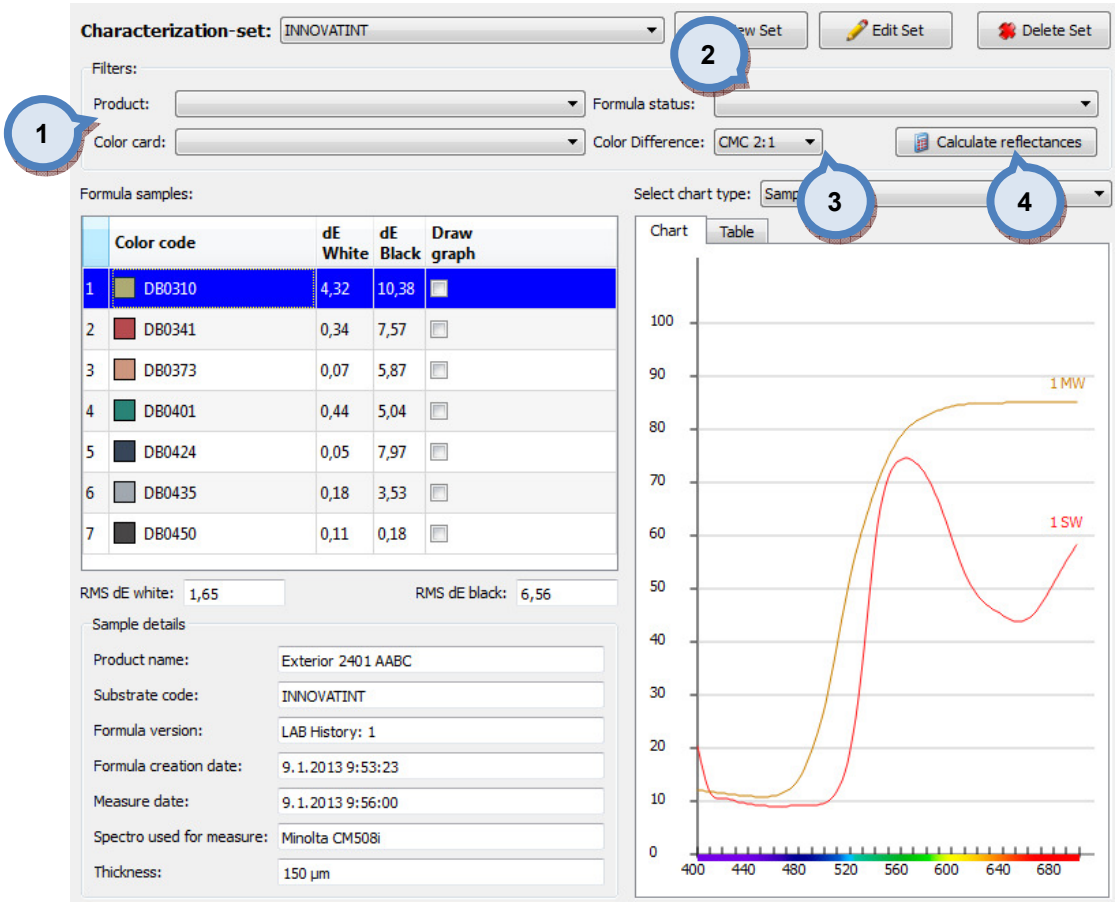
1.Filters: Area to limit number of samples

2.Formula sample: table to show measured samples

3.Sample details: Information about individual sample.

4.Chart view: Graphical presentation of the samples.

The **Filters** area has following options available:



1.Dropdown lists to limit selection by product and/or color card.

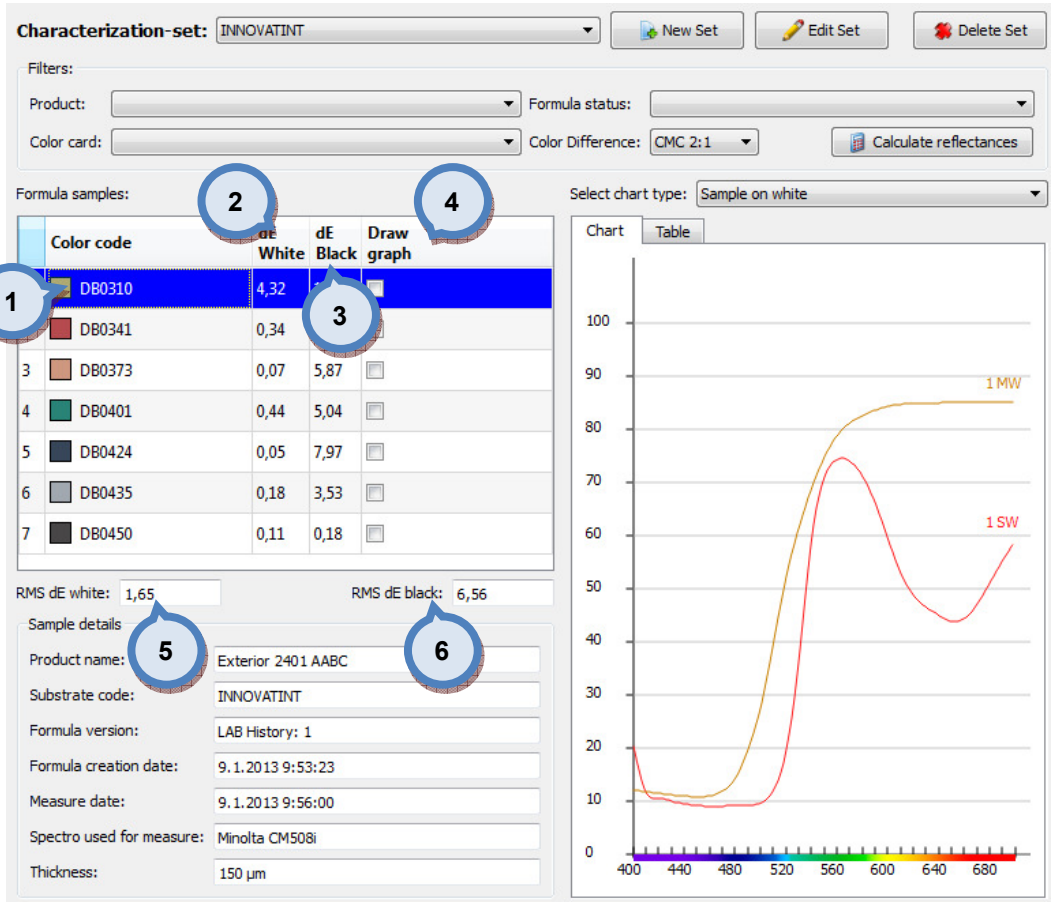
2.Formula status: Dropdown list to select desired type of measurement. see formula management area for more information about different statuses.

2.Formula sample: table to show measured samples

3.Color difference: Dropdown list to select color difference equation to be used in calculations, formula sample table.

4.Calculate reflectances: A button to recalculate set of data into the formula sample table.

The **Formula samples** area has following options available:



1.Color code: Name of the same and its visualisation.

2.dE White: dE value, measured over white substrate, between real measurement of the sample and theoretically calculated reflectance from the componenents used in the formula to achieve sample color.

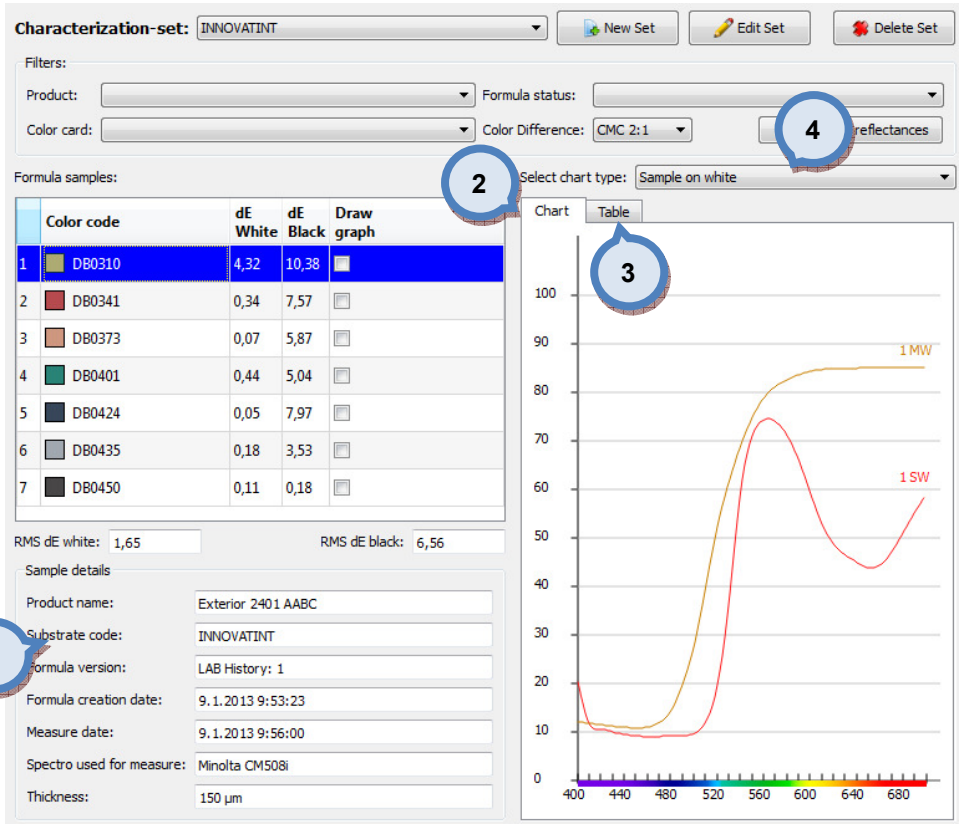
3.dE Black: dE value, measured over black substrate, between real measurement of the sample and theoretically calculated reflectance from the componenents used in the formula to achieve sample color.

4.Draw graph: Checkbox to select samples to the right hand side table.

5.RMS dE white: Root mean square value calculated from the sample set using white measurements.

6.RMS dE black: Root mean square value calculated from the sample set using black measurements.

The **Sample details and Chart** areas have following options available:



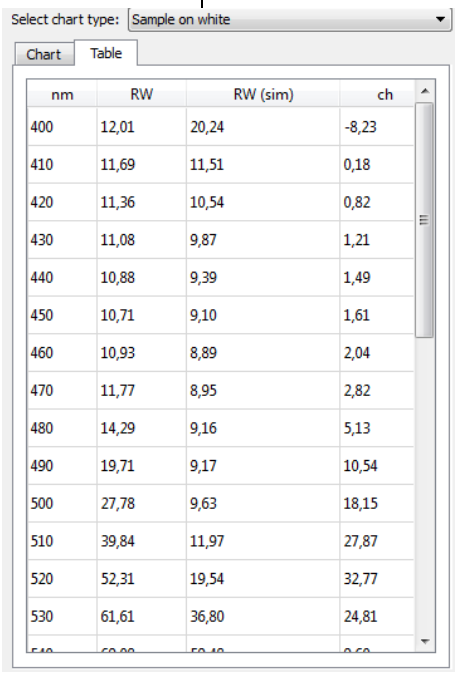
1.Sample details: Information about the selected sample.

2.Chart: Shows selected samples, their reflectance curves and simulated reflectance curves.

3.Table: shows selected sample reflectance and simulated reflectance in table format. see picture below.

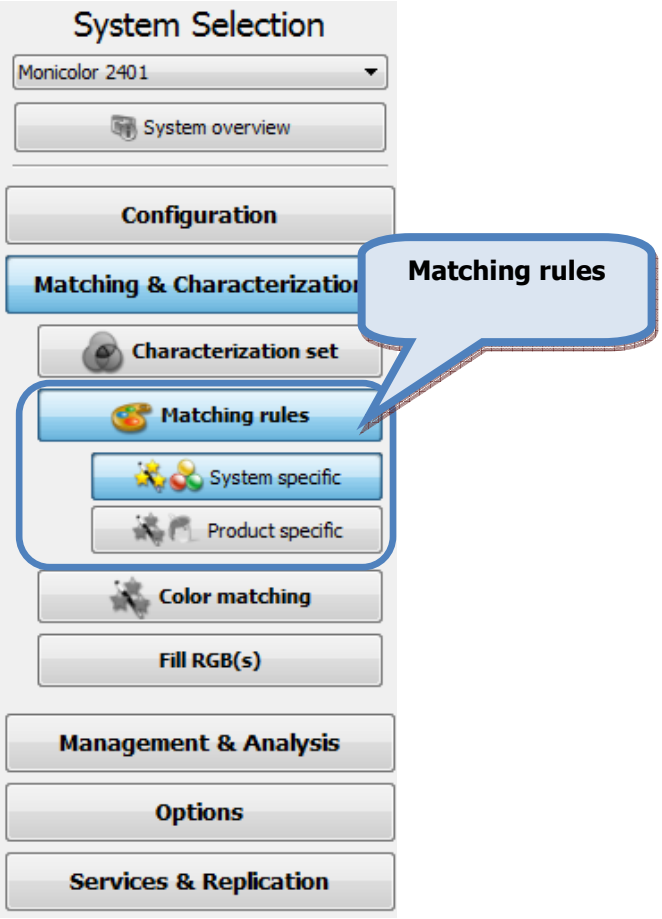
4.Select chart type: Dropdown list options are:

- Sample on white
- Sample on black
- Sample on white / black



3.2 Matching rules

On this section you can set matching rules that are applied based on either product or system. Rules available for use are colorant amount restrictions, and not-allowed colorant combinations.



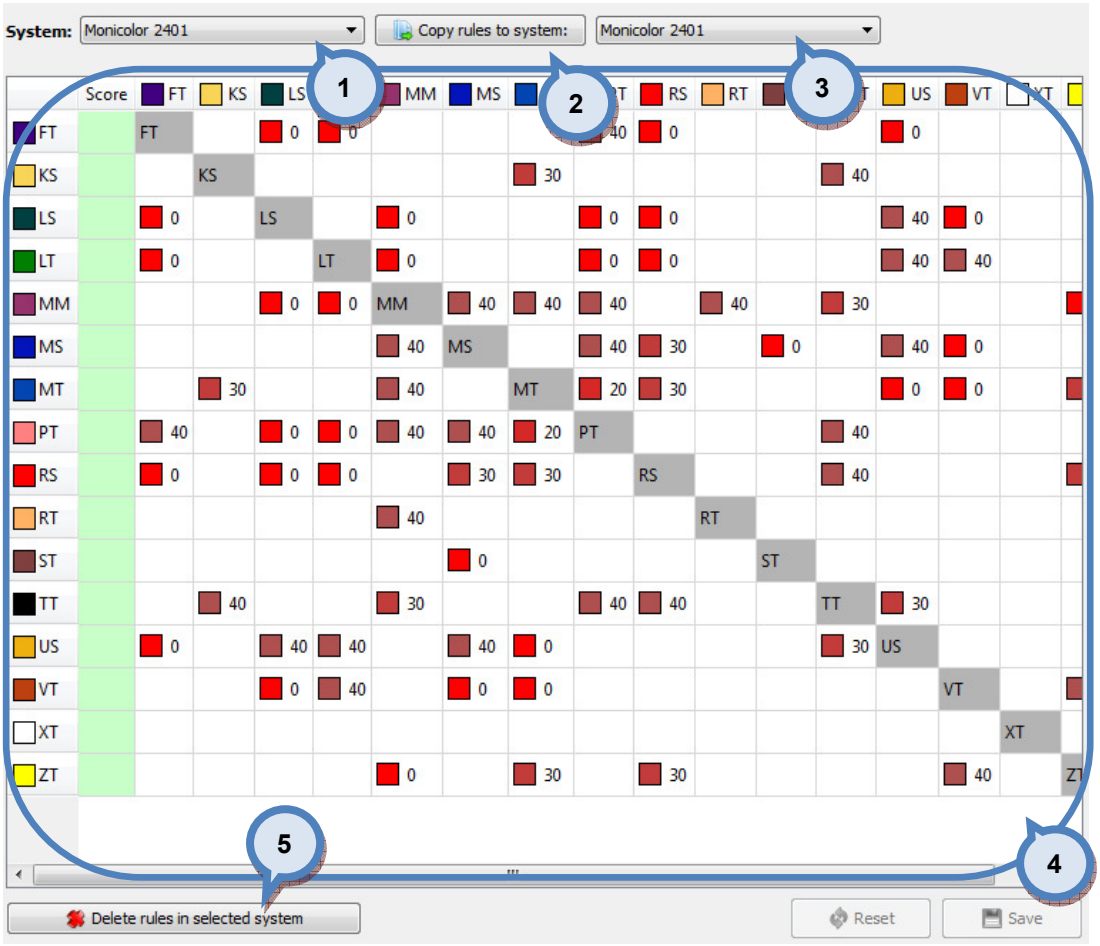
3.2.1 System specific

To set system specific matching rules, navigate into the **Matching and Characterization** ⇨ **Matching rules** ⇨ **System specific** page.

This feature is meant to allow the user to configure forbidden and avoidance pairs into Innovatint databases. These pairs will be active in matching new formulae and when looking at old formulae in products.

The idea behind the different combinations is that you can forbid colorant pairs that represent complimentary colors or are of different concentration levels of the same color. The avoidance pairs are meant for colorants which should not be used together due to the metamerism or cost issues. Or alternatively, this feature can be set to prefer certain pairs over the other colorants, like the inorganic colorants.

On **System specific** section, you have following options available:



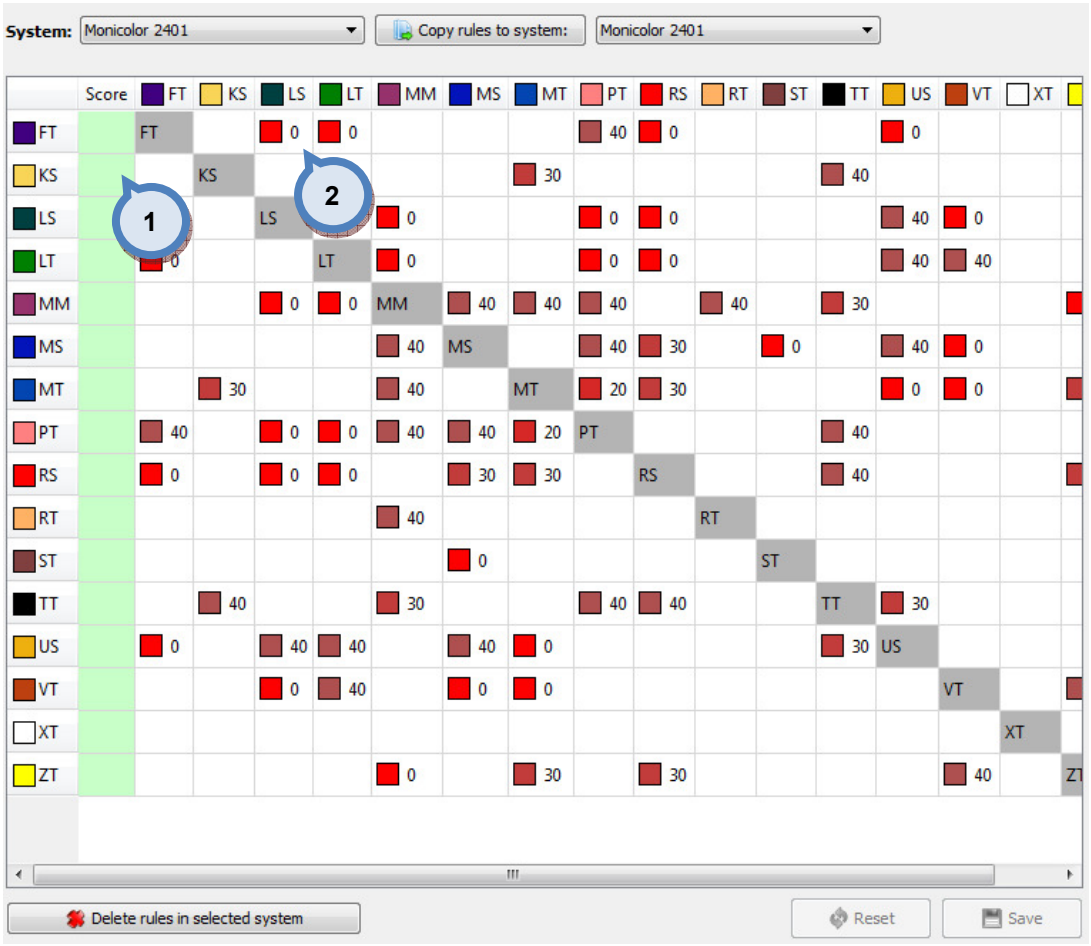
1.System: The drop down list to select system.

2.Copy rules to system: The button to copy rules to system (selected on the right hand side drop down list (**3**).

3.Table: The table of the colorants with the rules indicators.

4.Delete rules in selected system: The button to delete all rules in the selected system.

In the system specific **rules table** section, you have following options available:



1.Score: The text field to enter the score number. Score numbers: (1=most favourable colorant, 10=least favourable colorant)

2.Pair weights: The click on field to set weight for colorant pairs:

0 = not allowed pair

10 = 10% possibility to use

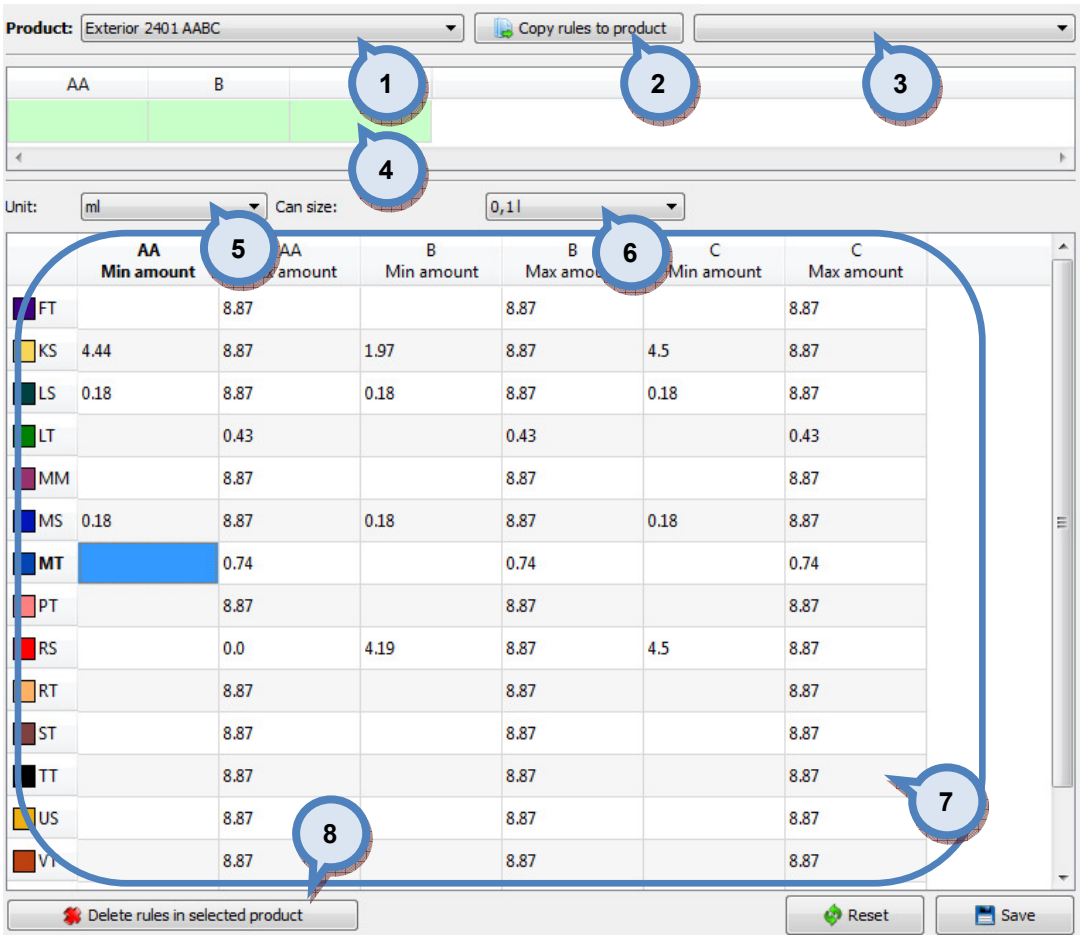
40 = 40% possibility to use

60 = 60% possibility to use

100 = should always be used as pair

3.2.2 Product specific

On **Product specific** section you have following options available:



1.Product: The drop down list to select the product.

2.Copy rules to product: The button to copy rules to product (selected on the right hand side drop down list (**3**).

4.Score: The table to display score for each base paint. Score numbers: (1=most favourable base paint, 10=least favourable base paint).

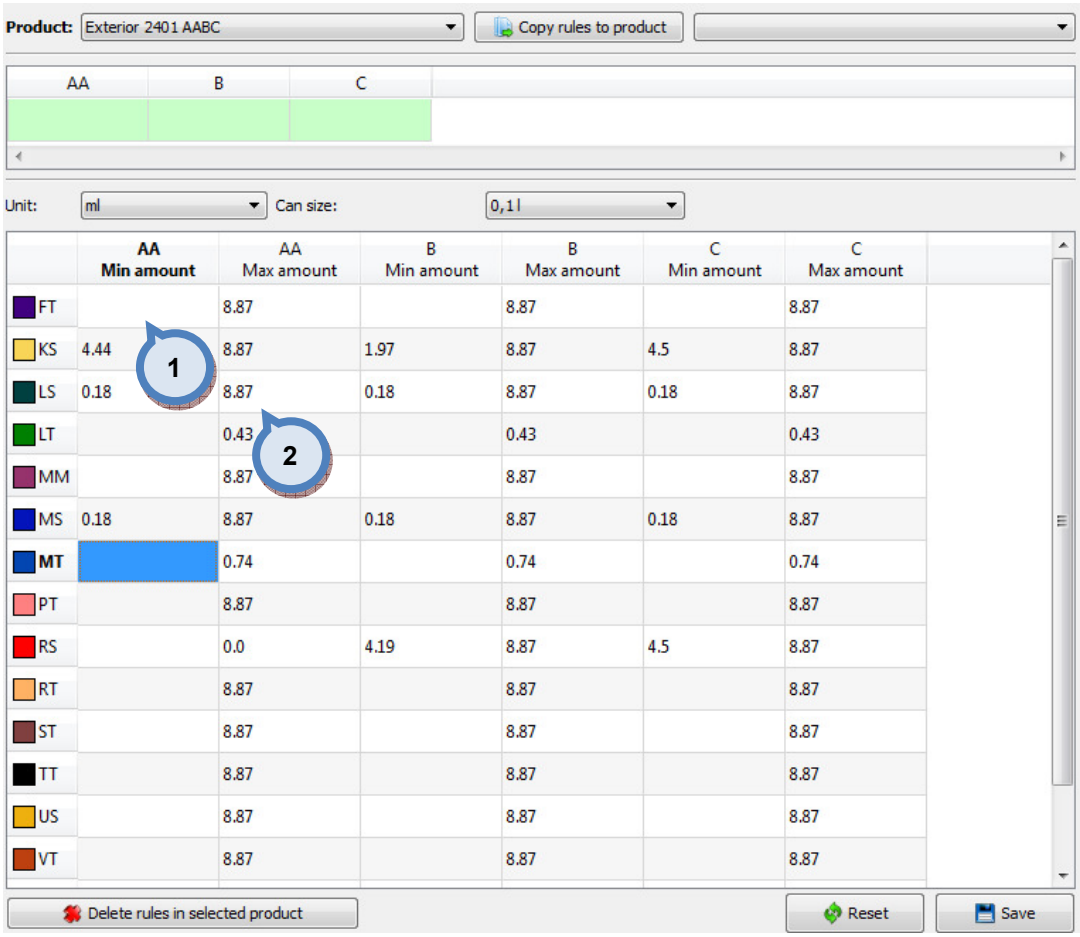
5.Unit: The drop down list to select used unit on the table below.

6.Can size: The drop down list to select used can size on the table below.

7.Table: The table of colorants with the rules indicators.

8.Delete rules in selected product: The button to delete rules in selected product.

In the system specific **rules table** section, you have following options available:



1.Min amount: The text value of the smallest allowed component amount. Each of the base paints are specified separately.

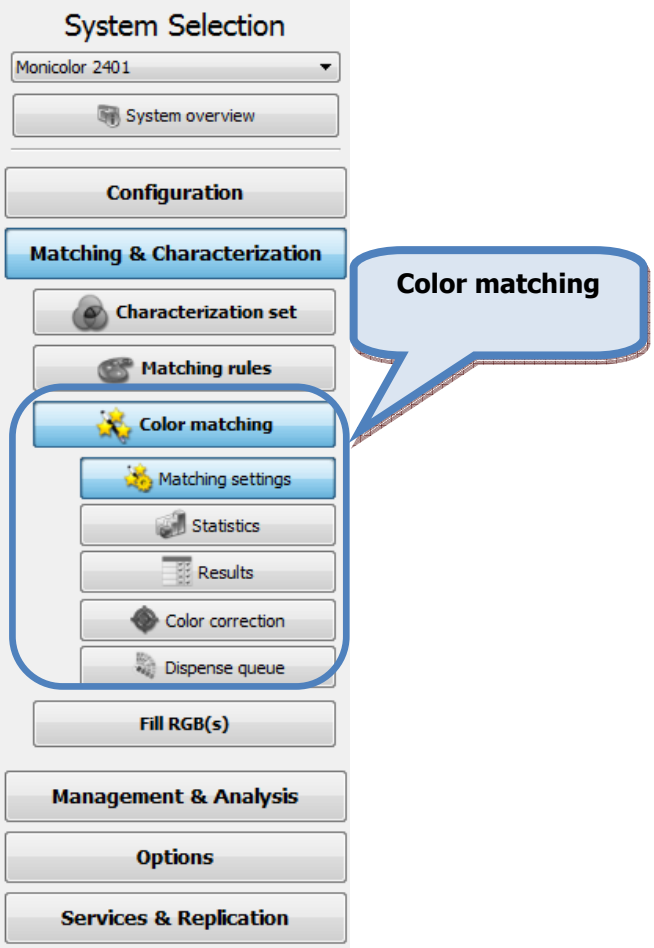
2.Max amount: The text value of the largest allowed component amount. Each of the base paints are specified separately.

NOTE: Relative to white colorant amount rules are set to the field to which it is compared to. Syntax is following:

3.3 Color matching

For matching, navigate into the **Matching and Characterization** ⇨ **Color matching** page.

On this page, you can set matching parameters, and execute matching for both single color, and set of colors in same time.

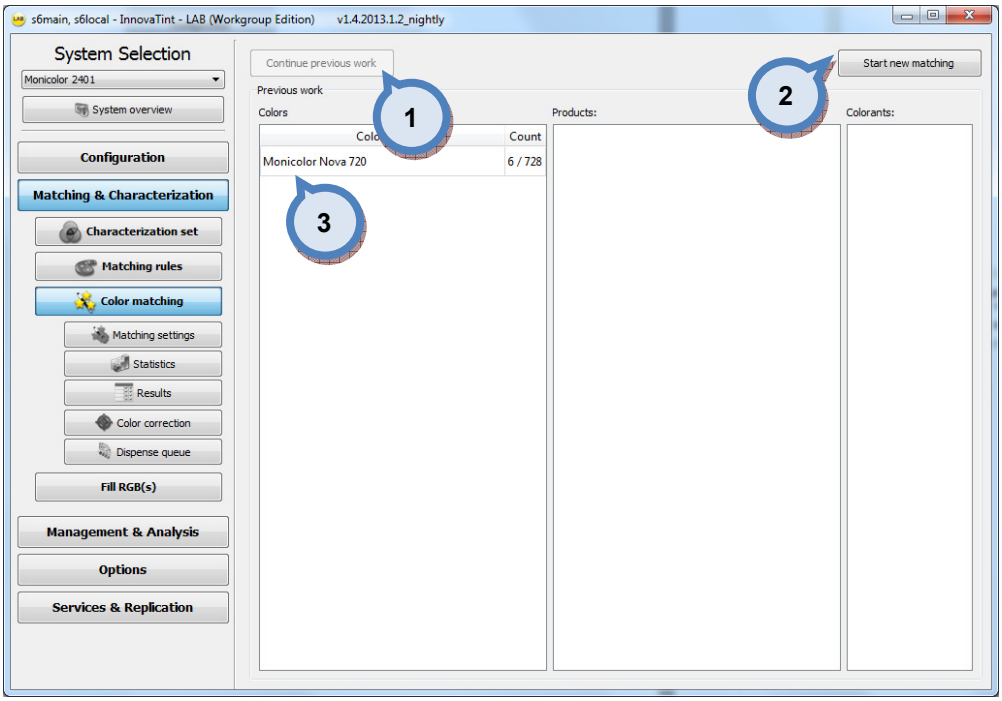


On color matching section you have five sub pages:

- Matching settings,
- Statistics,
- Results,
- Color correction, and
- Dispensing queue.

3.3.1 Matching settings

In the **Matching settings** window of the **Color matching** section, you have following options available:

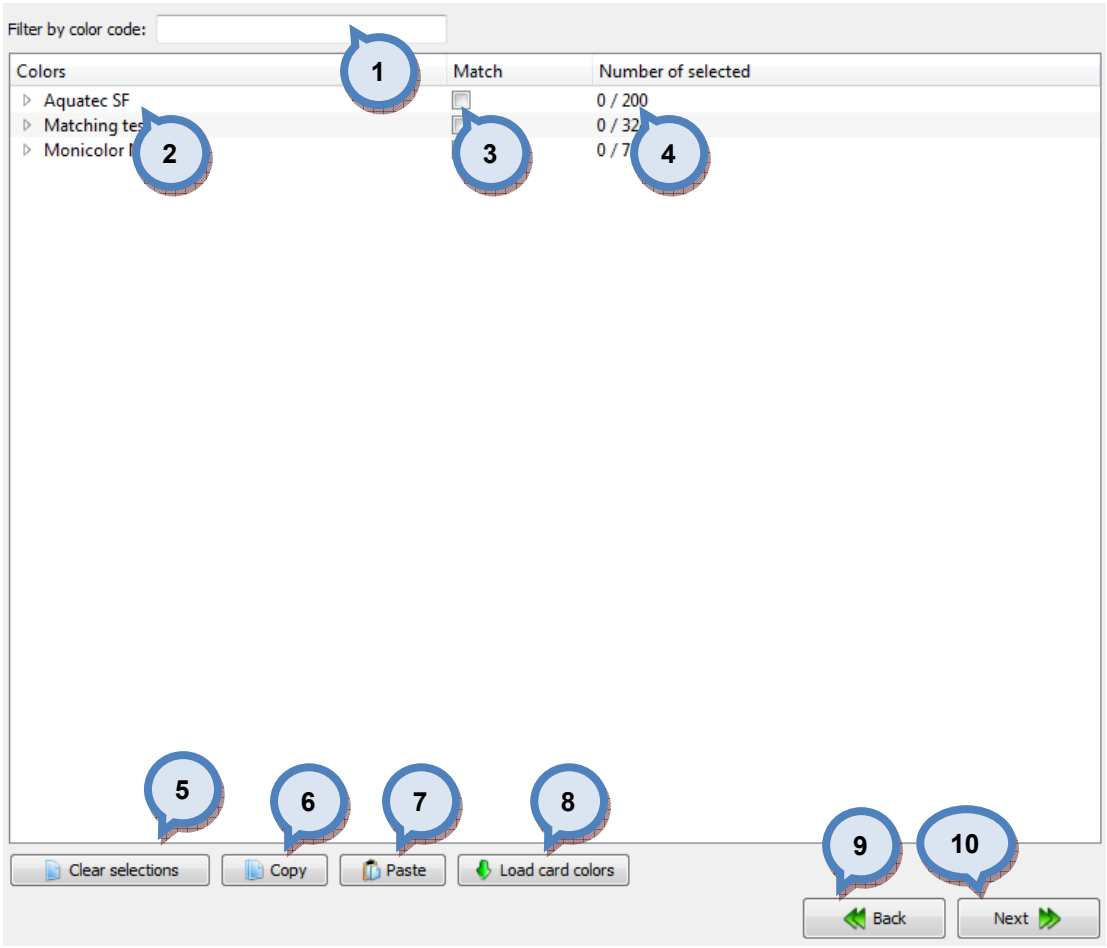


1.Continue previous work: The button to continue previous matching work. Use Previous work tables to select work to be continued.

2.Start new matching: The button to start a new matching work.

3.Color: The list of previous matched colors.

When **Start new matching** button is clicked, following window opens up:



1.Filter by color cade: The text field to filter Colors list.

2.Colors: The list of color cards available.

3.Match: When check box is enabled, whole color card will be matched.

4.Number of selected: The text field to display the number of colors selected from the color card into the matching work, out of total number of colors in the color card.

5.Clear selections: The button to clear selections.

6.Copy: The button to copy the table content in to the clipboard.

7.Paste: The button to paste the clipboard content in to the table.

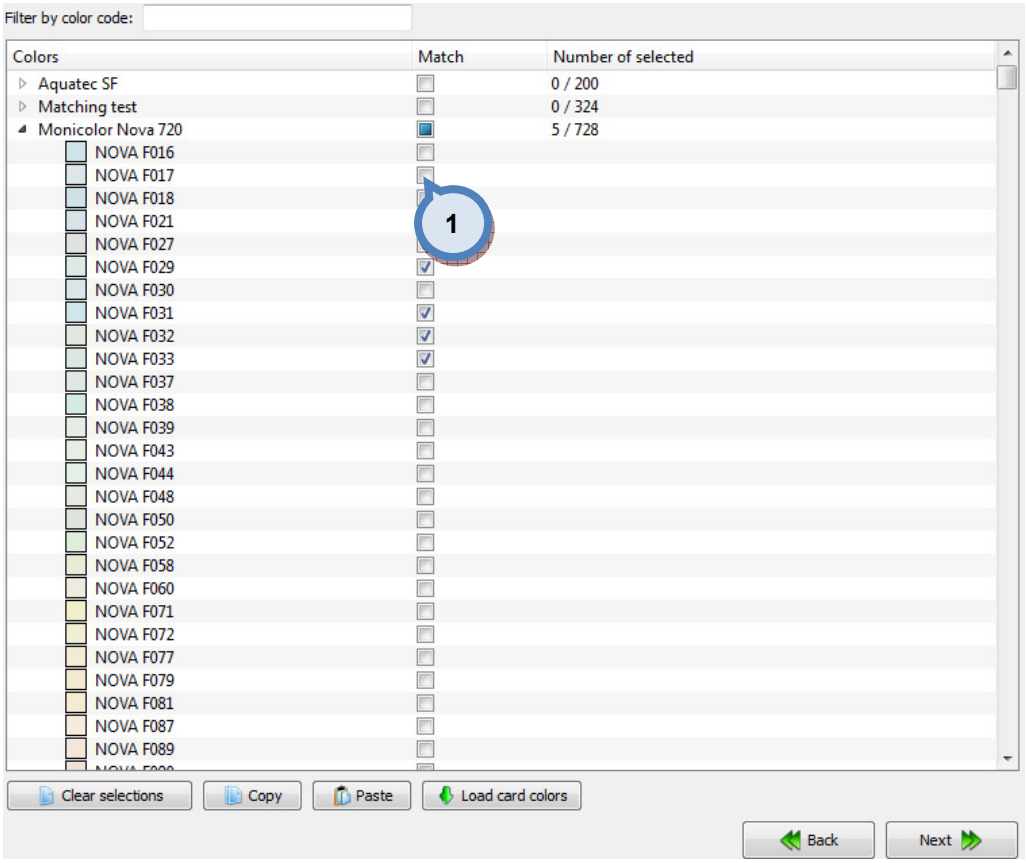
Note: Only the color codes that matches the color codes in the database are selected, the other codes are neglected.

8.Load card colors: The button to load card colors in to the table.

9.Back: The button to return to the previous window.

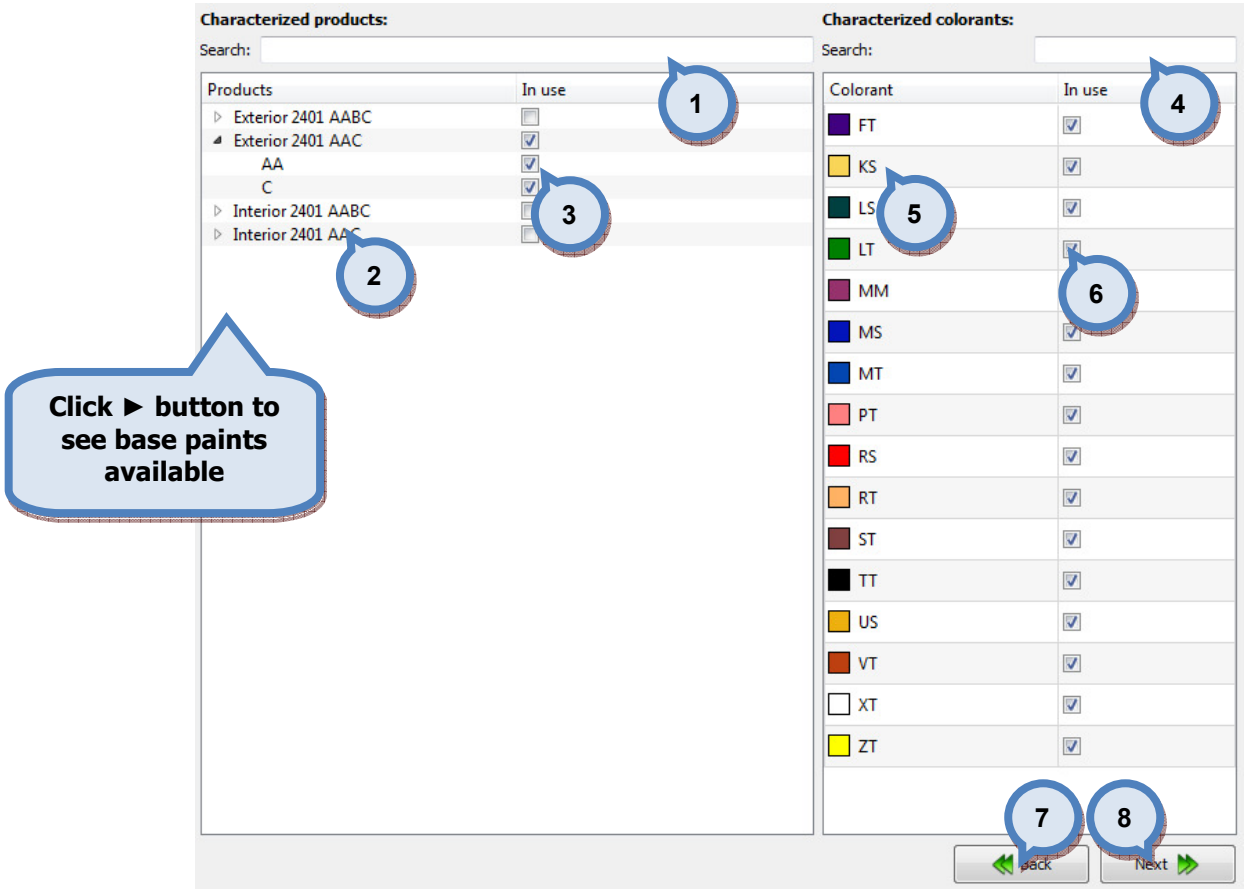
10.Next: The button to proceed to the next window.

When **Load card colors** button is clicked, following options are available:



1.Match: When check box is enabled, color code is included in to the matching work.

When **Next** button is clicked, following window opens up:



1.Search: The text field to search products by name or parts of the name.

2.Products: The list of products and base paints available.

3.In use: When check box is enabled, selected component is used in matching.

4. Search: The text field to search colorants by name/code or parts of the name/code.

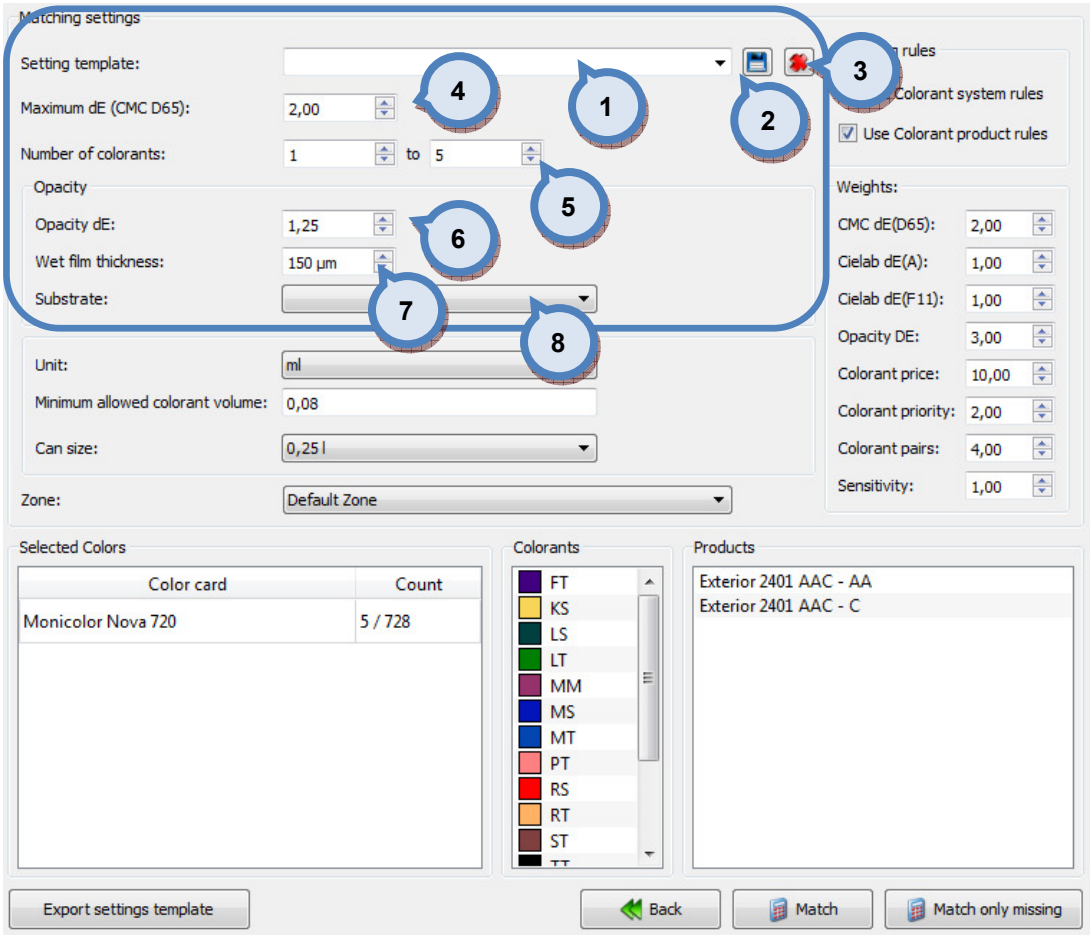
5.Colorants: The name or code of the colorant.

6.In use: When the check box is enabled, the colorant is used in the matching work.

7.Back: The button to return to the previous window.

8.Next: The button to proceed to the next window.

When **Next** button is clicked, following window opens up, it has following options available on the **upper left hand side**:



1.Setting template: The drop down field to select setting template.

2. **:** The button to save setting template.

3. **:** The button to delete selected setting template.

4. Maximum dE (CMC D65): The text field to specify maximum color difference allowed in the calculation, calculated with CMC using D65 light.

5.Number of colorants: The minimum and maximum number of the colorants used in calculation.

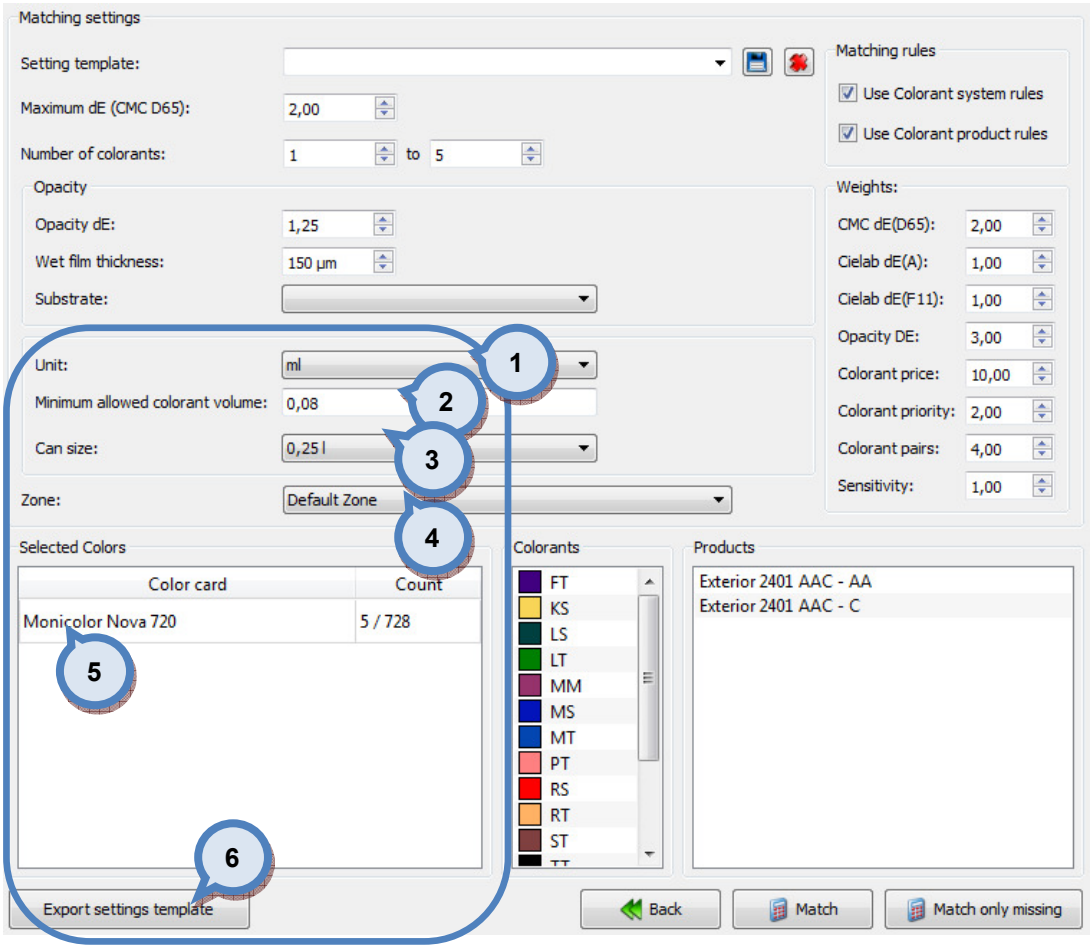
6.Opacity dE: The text field to set color difference tolerance to reach the opacity of the drawdown.

Note: This setting is used with the combination of film thickness on field (7).

7.Wet film thickness: The text field to specify used film thickness.

8.Substrate: The button to select substrate used.

The following options available on the **lower left hand side**:



1.Unit: Unit type where 'minimum allowed colorant value' is refered to.

2. Minimum allowed colorant volume: The text field to specify minimum allowed colorant volume in the calculation. This setting is used in combination of the Can size (2).

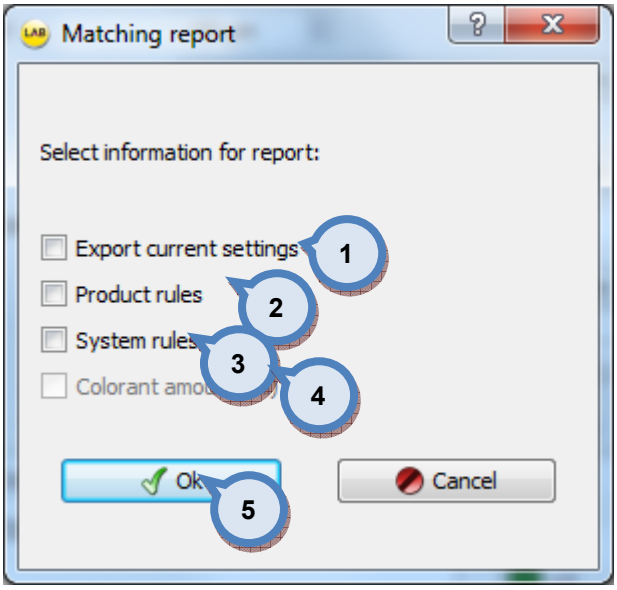
3.Can size: The can size used in the calculation. This setting is used in combination of the Minimum allowed colorant volume (1).

4.Zone: The drop down menu to select used Zone. This setting will determine the used colorant and product prices.

5.Selected colors: The list of selected color cards, and number of colors.

6.Export settings template: The button to export settings template.

When **Export settings template** button is clicked, following window opens up:



1.Export current settings: The button to export current settings.

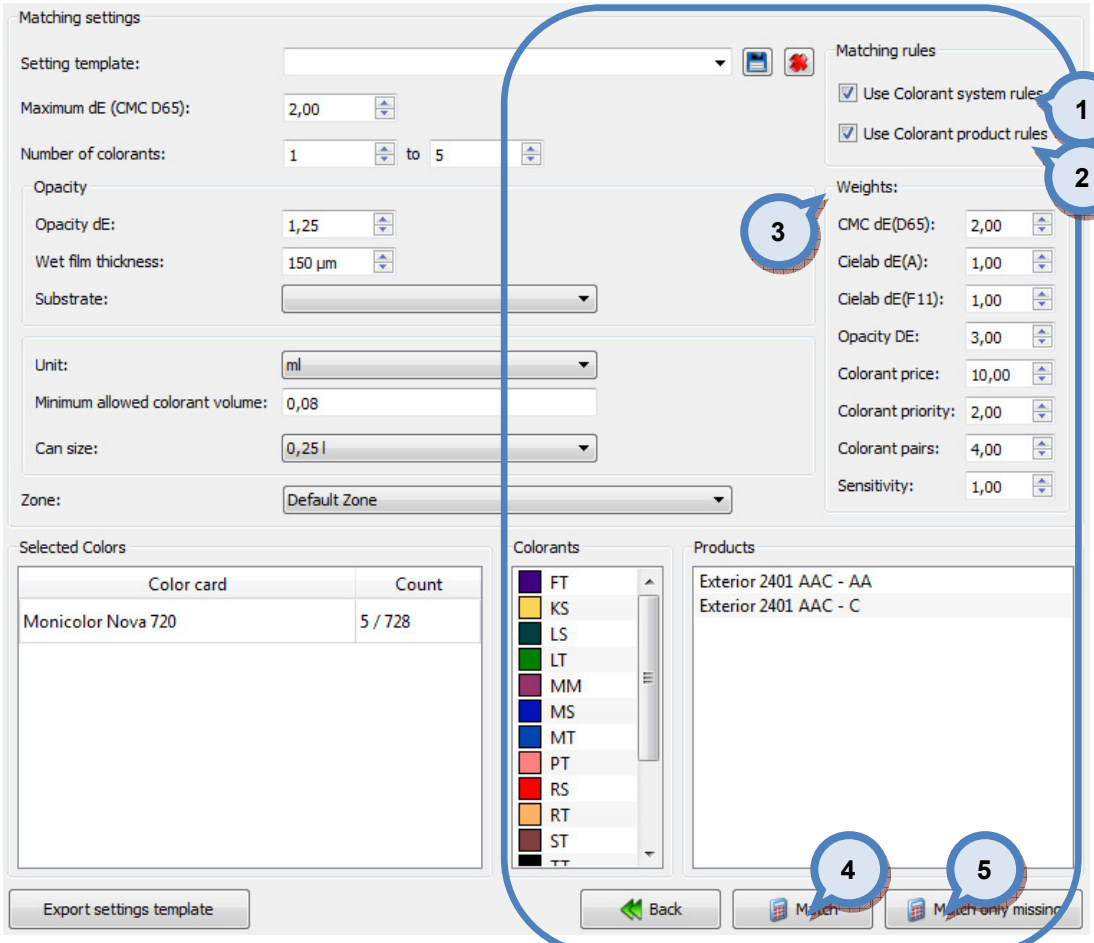
2.Product rules: The button to export the product rules.

3.System rules: The button to export the system rules.

4.Colorant amount (ml): The button to export the colorant amounts in millilitres. (this is active component after the matching. see: 3.3.2.**statistics, save matching report.)**

5.Ok: When OK button is clicked, the pdf file is created into the folder user specifies before saving the file.

The following options available on the **right hand side**:



1.Use Colorant system rules: When check box is enabled, system rules are used in matching work.

2.Use Colorant product rules: When check box is enabled, product rules are used in matching work.

3.Weights: The text fields to specify weights to be used in matching work. The biggest number has the biggest weight.

CMC dE(D65): Color difference using CMC formula with D65 light.

Cielab dE(A): Color difference using Cielab formula with A light.

Cielab dE(F11): Color difference using Cielab formula with F11 light.

Contrast ratio: Opacity of the drawdown on specified film thickness.

Colorant price: Color formula price.

Colorant priority: Colorant score, specified on the system specific rules.

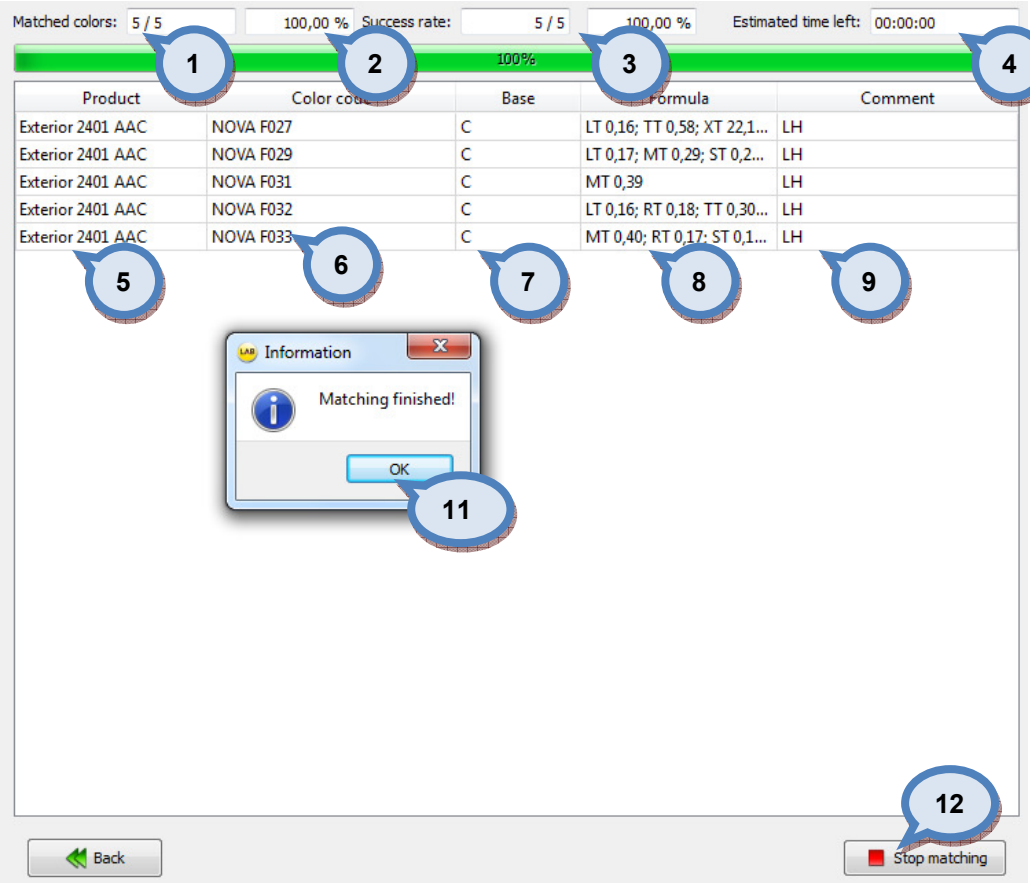
Colorant pairs: Not allowed colorant pairs, specified on the system specific rules.

Sensitivity: Colorant sensitivity is a value to determine the impact on the accuracy of the formula when there is a dispensing inaccuracy. With the same dispensing error percentage the low concentrated colorants has smaller impact on final color accuracy than with the high concentrated colorants.

4.Match: The button to start matching work.

5.Match only missing: The button to start matching work to match only missing colors (ones not to have formula available).

When **Match** or **match only missing** buttons are clicked, following window opens up:



1.Matched colors: Status of the matching, number of colors matched against number of colors in the project.

2.Matched colors%: Status of the project, number of matched colors in % of the project.

3.Success rate: Status of the matching, number of colors being able to match against how many tried.

4.Estimated time left: Time left to conclude matching project.

5.Product: Product where match made

6.Color code: Matched color

7.Base: Used base

8.Formula: Suggested formula

9.Comment: Comment if formula not hiding, LH (=low hiding)

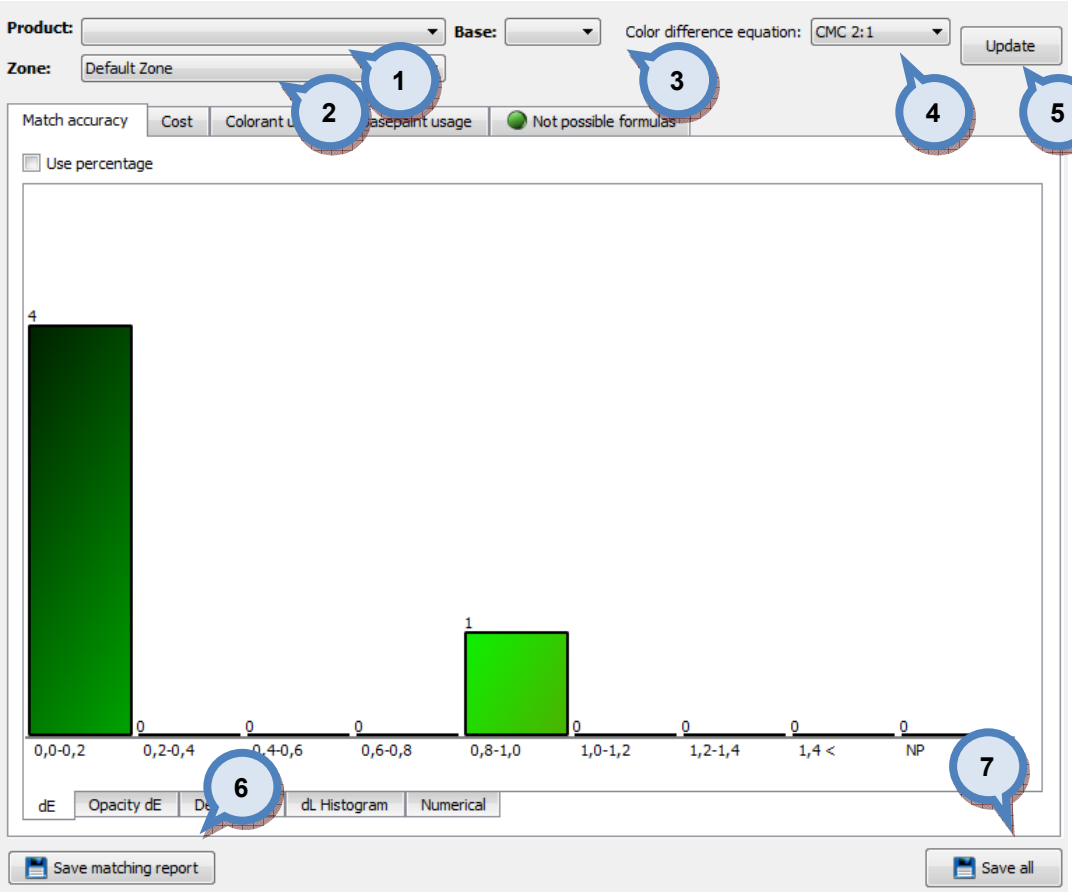
10.Stop matching: The button to cancel matching process.

11.OK: The button to proceed on the **Statistics** window.

Note: If only one color is matched, the Statistics (section 3.3.2) view is skipped and the user is guided directly into the Results > Details (section 3.3.3) view page.

3.3.2 Statistics

On statistics page you have 5 tab page to view statistics by: matching accuracy, cost, colorant usage, base paint usage, and not possible formulas. On all of the tab pages, you have following options:



1.Product: The drop down list to select the product.

2.Zone: The drop down list to select the zone.

3.Base: The drop down list to select the base.

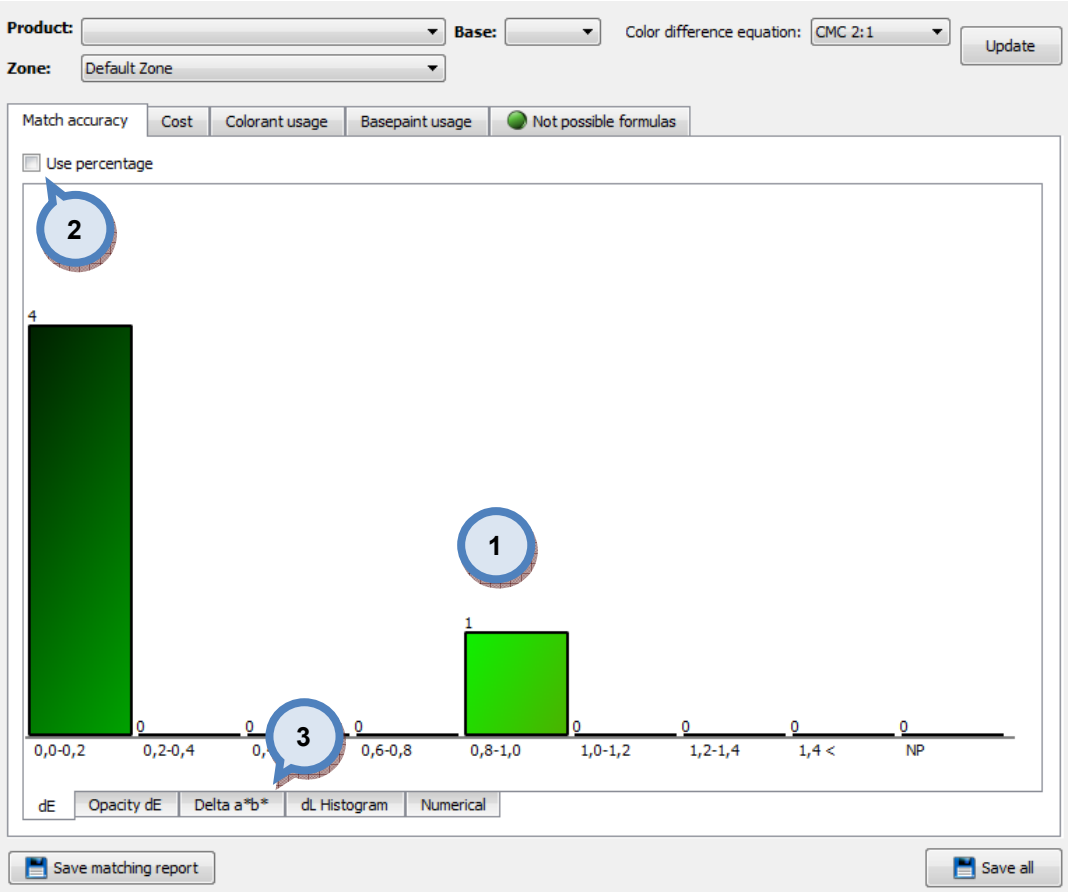
4.Color difference equation: The drop down list to select color equation used in the calculation.

5.Update: The button to re-fresh the graphs after making changes to selections.

6.Save matching report: The button to save the matching report.

7.Save all: The button to save all formula as a working version.

On the **Matching accuracy** tab page of the **Statistics** window, you have following options:

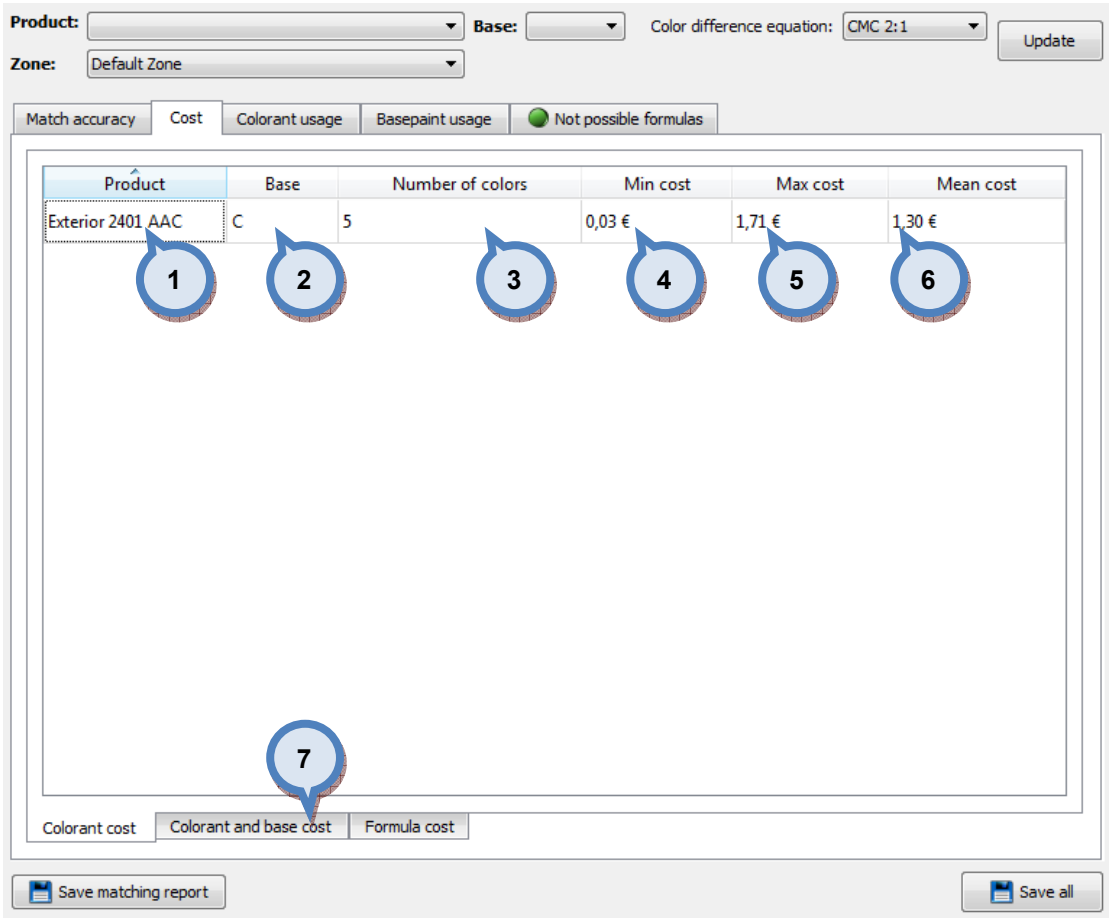


1.The graph: The graph to visualise the matching result.

2.Use percentage: When check box is enabled, the values in the graph are based on percentages.

3.Tab pages: The matching values can be viewed by dE, Opacity dE, Delta a*b*, dL Histogram, and Numerical values, represented on separate tab pages.

On the **Cost** tab page of the **Statistics** window, you have following options:



1.Product: The product code or name.

2.Base: The base code.

3.Number of colors: The number of matched colors.

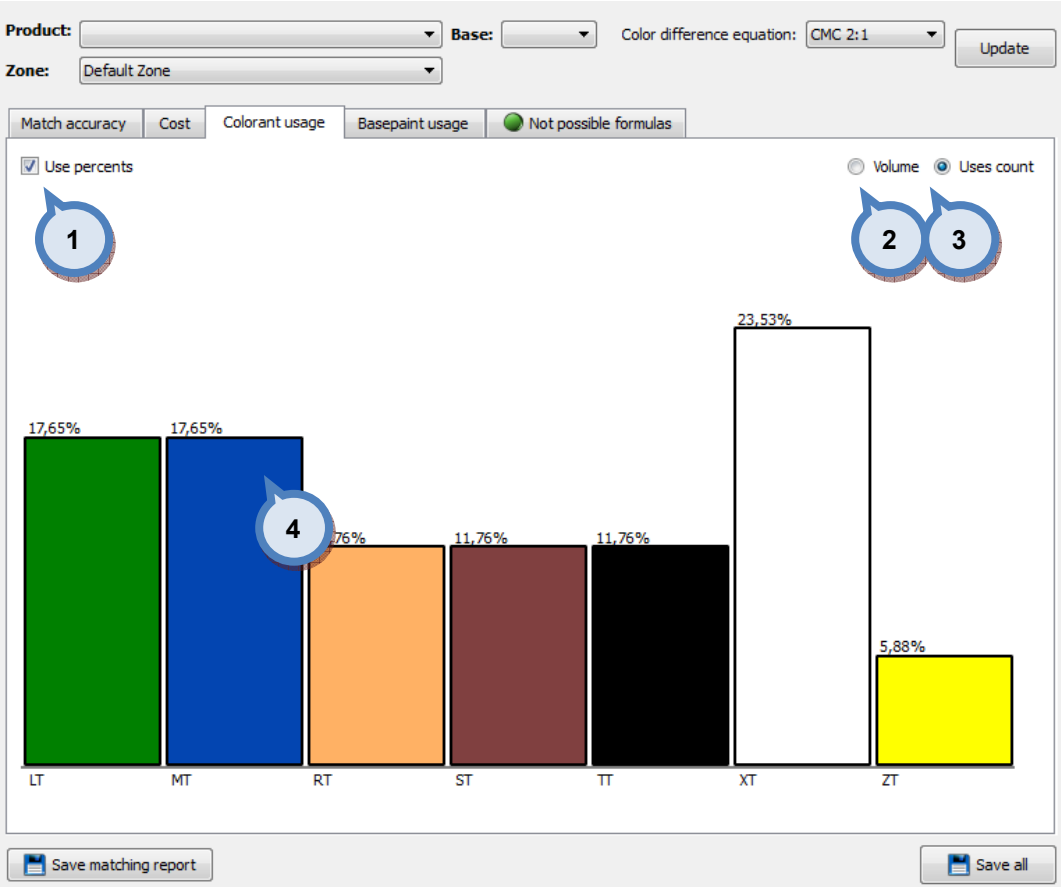
4.Min cost. The lowest cost of all matches.

5.Max cost. The highest cost of all matches.

6.Mean cost. The mean value of cost of all matches.

7.Tab pages: The matching costs can be viewed by Colorant cost, Colorant and base cost, and Formula cost representated on separate tab pages.

On the **Colorant usage** tab page of the **Statistics** window, you have following options:



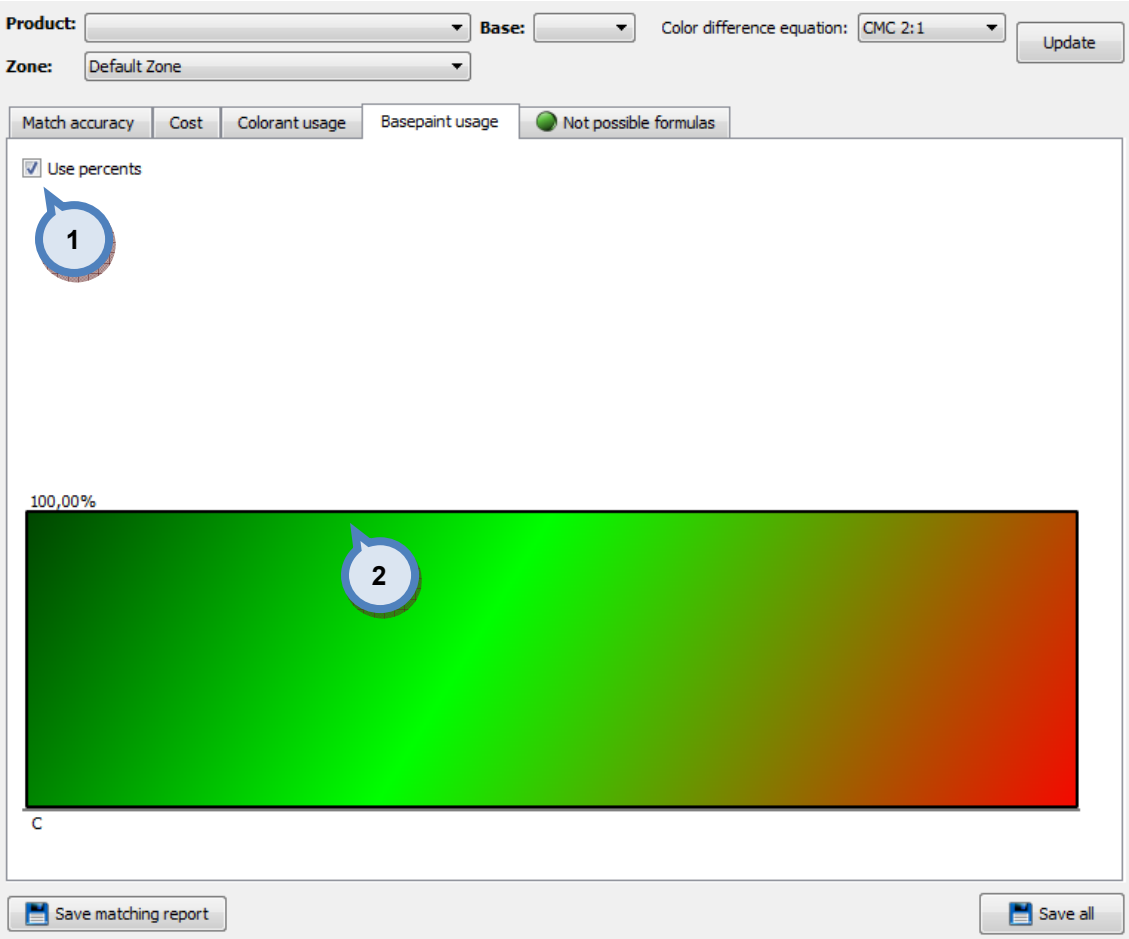
1.Use percents: When the check box is enabled, percentage values are used on the visual display, instead of volume.

2.Volume: The radio button to enable the view by volume.

3.Uses count: The radio button to enable view by number of colorants.

4.Visual display. The visual display of the colorants used.

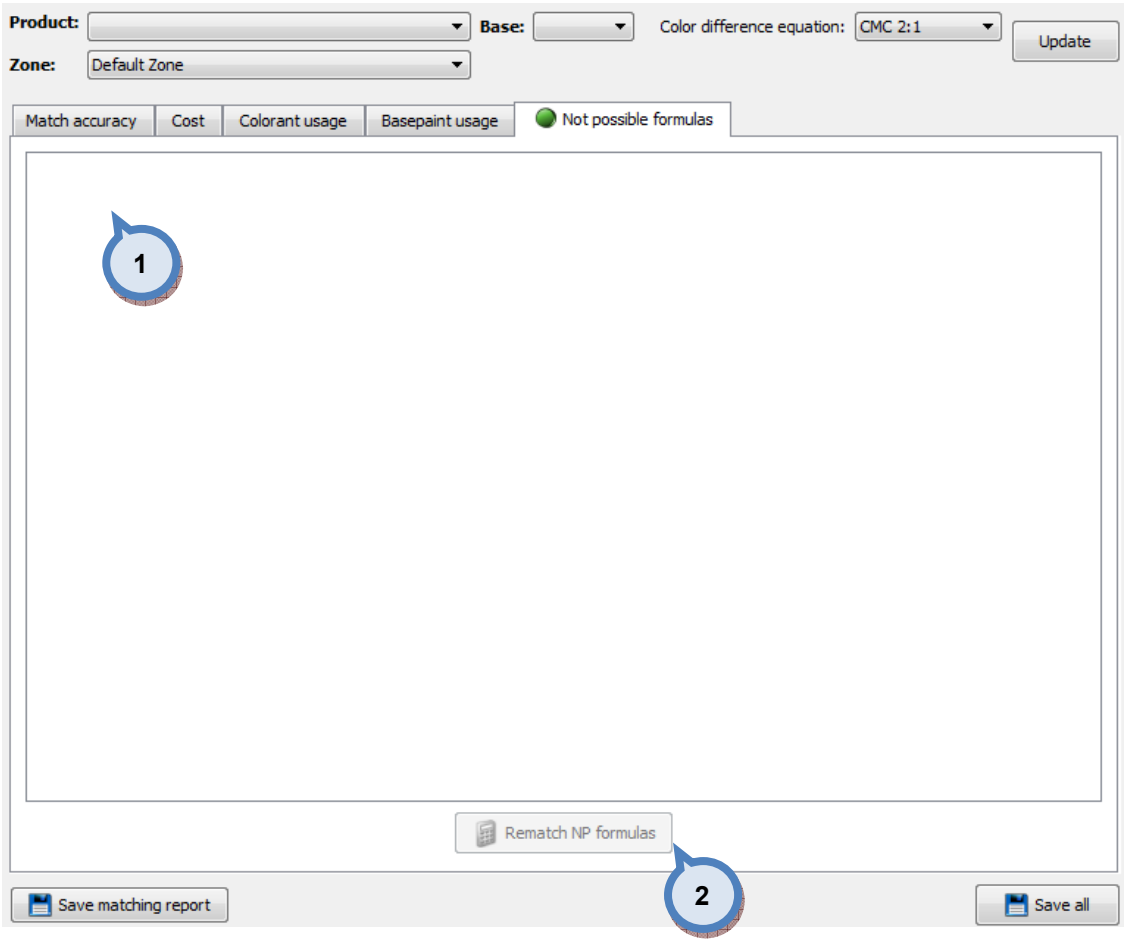
On the **Basepaint usage** tab page of the **Statistics** window, you have following options:



1.Use percents: When the check box is enabled, percentage values are used on the visual display, instead of volume.

2.Visual display. The visual display of the base paints used.

On the **Not possible formulas** tab page of the **Statistics** window, you have following options:



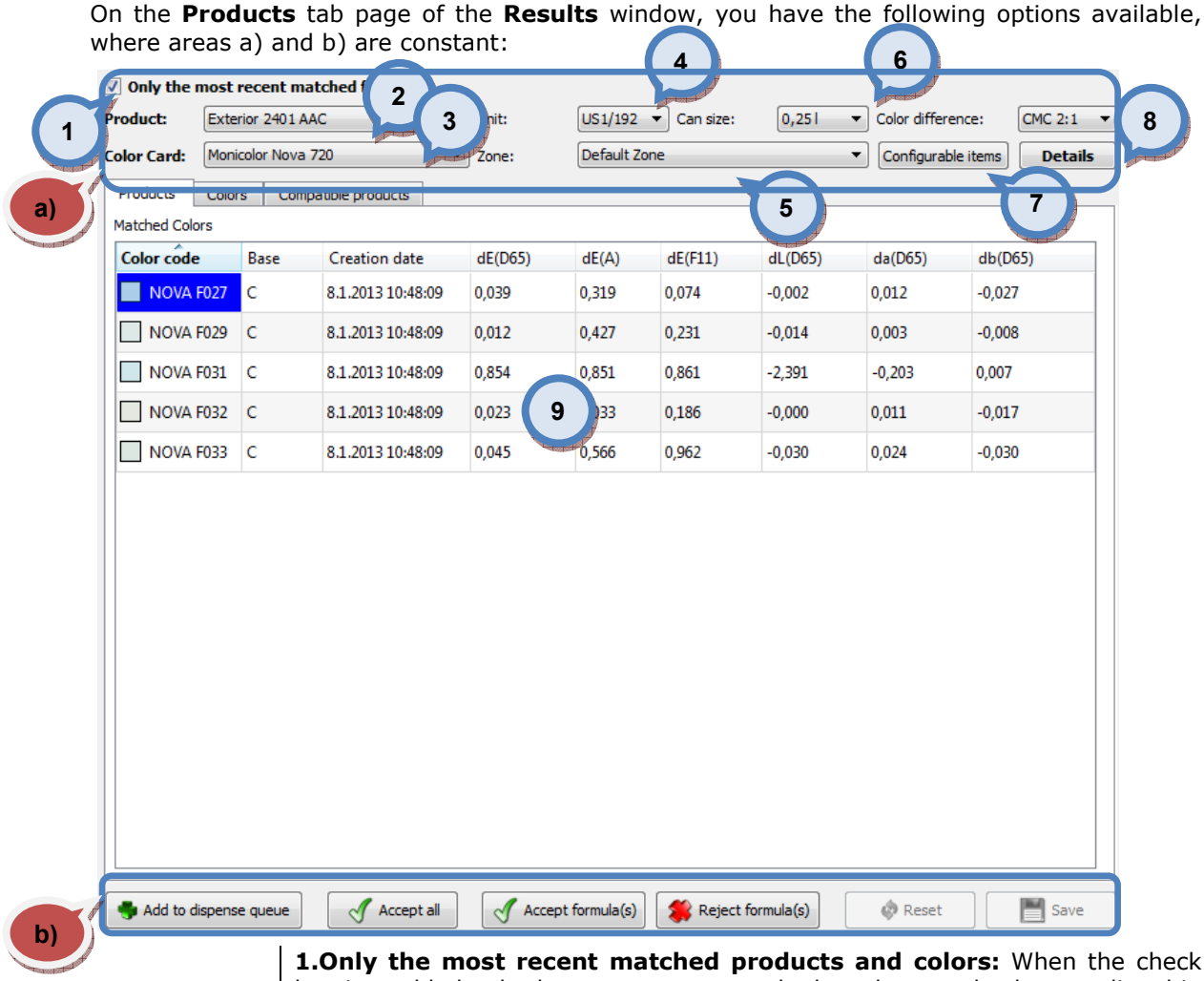
1.List. The list of the not possible formulas.

2.Rematch NP formulas. The button to return to matching settings to match not possible formulas (using other matching settings).

3.3.3 Results

On the results page, you can view, accept, or reject all color formula matched. Results page has three tab pages: Products, Colors, and Compatible products.

On the **Products** tab page of the **Results** window, you have the following options available, where areas a) and b) are constant:



1.Only the most recent matched products and colors: When the check box is enabled only the most recent matched products and colors are listed in the table.

2.Products: The drop down list to select the product.

3.Color card: The drop down list to the color card.

4.Unit: The drop down list to select the unit.

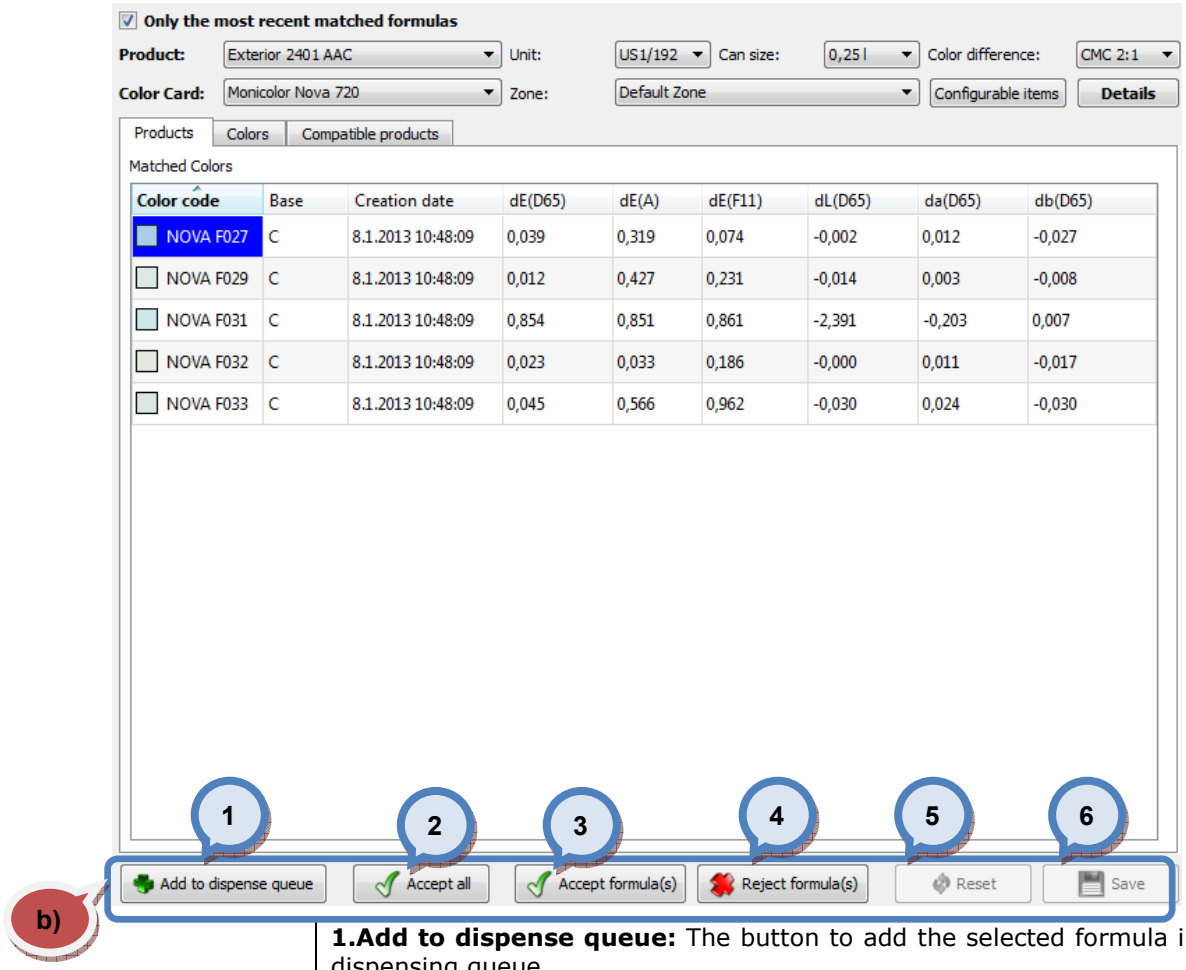
5.Zone: The drop down list to select the zone.

6.Can size: The drop down list to select the can size

7.Configurable items: The button to select items to be show on details.

8.Details: The button to show details.

9.Table of results: Content of the table is defined by 'Configurable items'-button. see next pages.



1.Add to dispense queue: The button to add the selected formula in to the dispensing queue.

2.Accept all: The button to accept all of the matched color formula on the list.

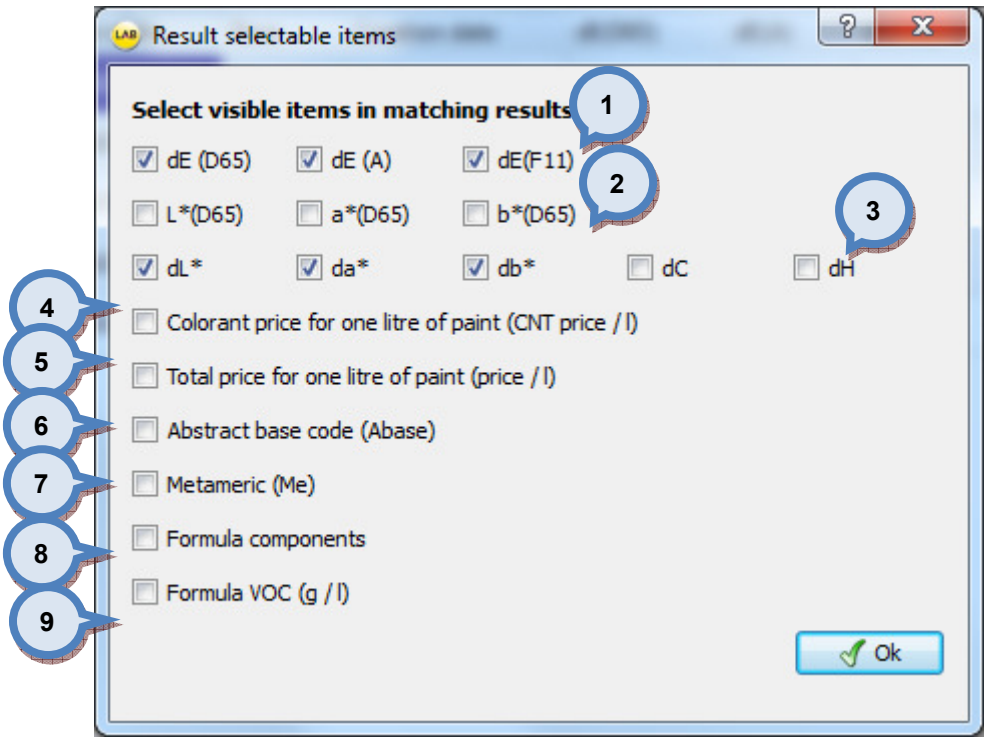
3.Accept formula(s): The button to accept all of the matched color formula on the list.

4.Reject formula(s): The button to reject all of the selected color formula on the list.

5.Reset: to reset the changes made for the formulas. Active only if color rematched in details area

6.Save: To save the changes. Active only if color rematched in the details area.

When **configurable items** button is clicked, following window is open up:



1.The color difference equation with different light source. (D65, A, F11)

2.The color co-ordinate values (L*, a*, b*) for D65 light source.

3.The color difference values for all co-ordinates (dL*, da*, db*, dC, and dH) by using D65 light source and CMC 2:1 color difference equation.

4.Colorant cost for one litre of paint: The cost of the colorants in the formula. Unit of measure is currency unit used / litre.

5.Total cost for one litre of paint: The cost of the base and the colorants in the formula. Unit of measure is currency unit used / litre.

6.Abstract base code: The code of the abstract base.

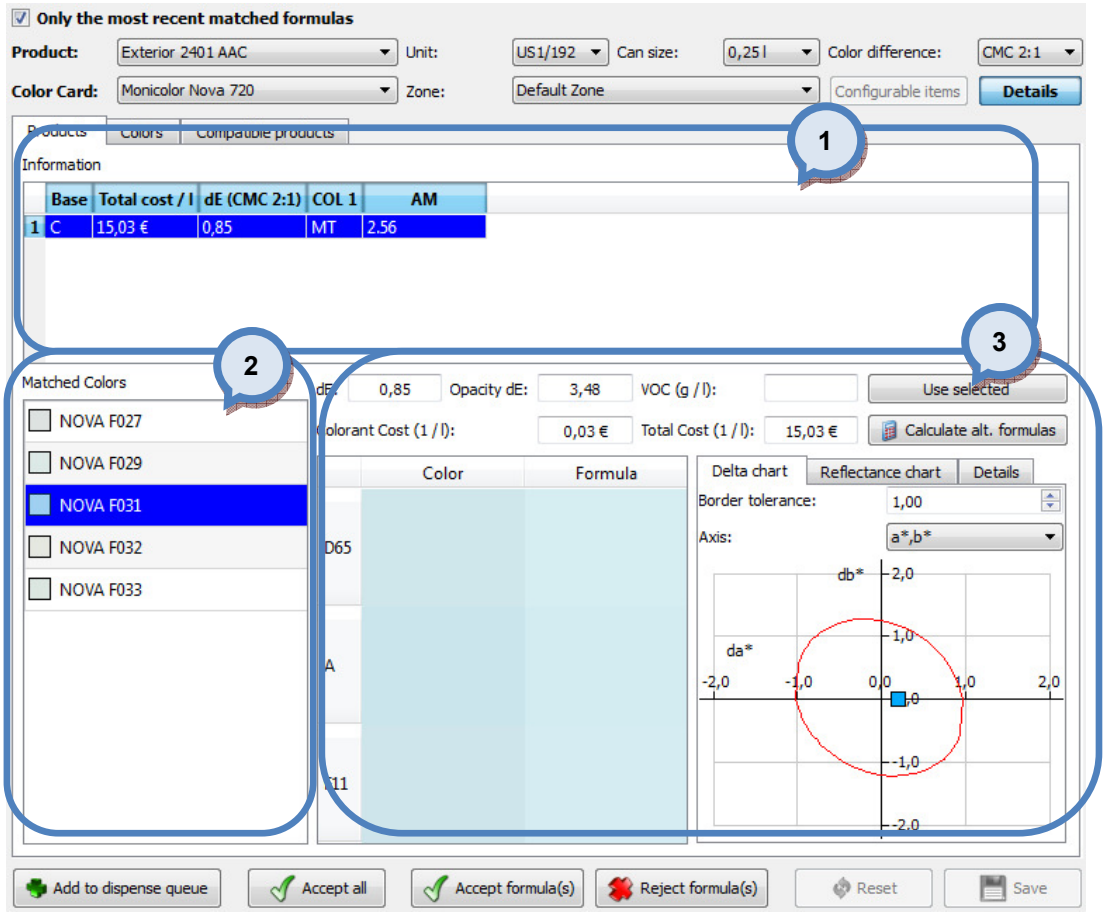
7.Metameric: The metamerism value. The metamerism value is calcualted based on the selected color difference equation (CIEdE2000, CMC2:1, etc), by the sum of the color difference values with three lights (dE(D65)+dE(A)+dE(F11).

8.Formula components: The base and the colorant codes and the values of the colorants in the formula.

9.Formula VOC (g/l): The amount of VOC components in the formula, colorant + bases, if set.

Note: Items selected here (check box is enabled) are displayed on the information section when details button is clicked.

When **Details** button is clicked, following items are available:

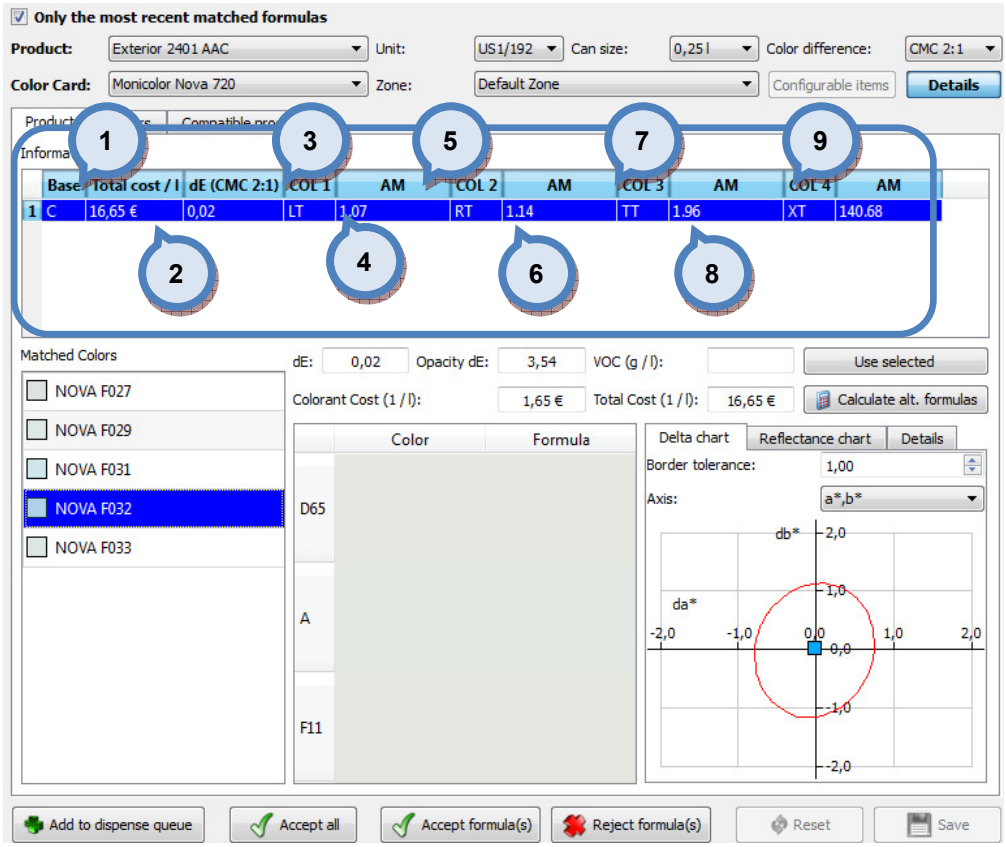


1.Information: The table to show detailed information on matched colors.

2.Matched colors: The table to show the list of matched colors.

3. The section to display detailed color information and button to rematch the color.

When **Details** button is clicked, following items are available on the **Information** section:



1.Base: The column to display base paint used in the formula.

2.Total cost: The column to display the total cost of the formula. Unit of measure is currency unit used / litre.

3.dE CMC 2:1): The column to display the calculated color difference between target and matched color formula, using CMC 2:1 equation.

4.COL1: The column to display the 1st colorant name or code used in the matched formula.

5.AM: The column to display the amount of the 1st colorant used in the matched formula. Unit of measure as selected on the upper parts of the screen.

6.COL2: The column to display the 2nd colorant name or code used in the matched formula.

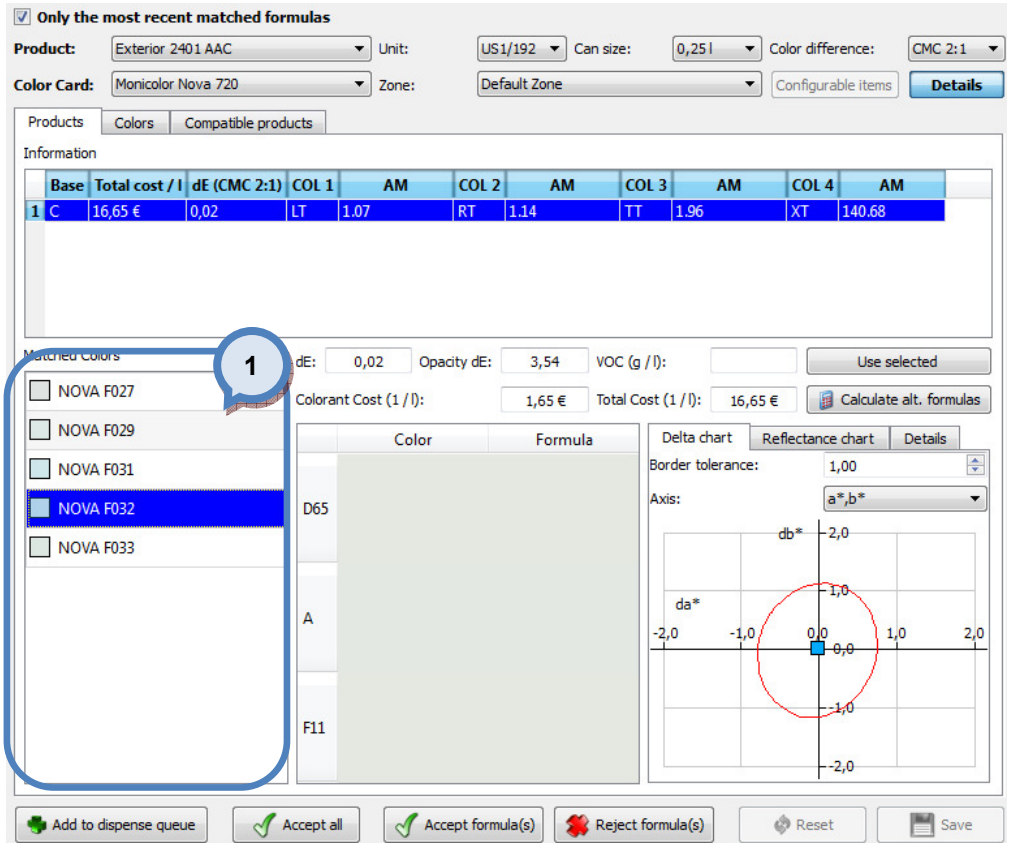
7.AM: The column to display the amount of the 2nd colorant used in the matched formula. Unit of measure as selected on the upper parts of the screen.

8.COL3: The column to display the 3rd colorant name or code used in the matched formula.

9.AM: The column to display the amount of the 3rd colorant used in the matched formula. Unit of measure as selected on the upper parts of the screen.

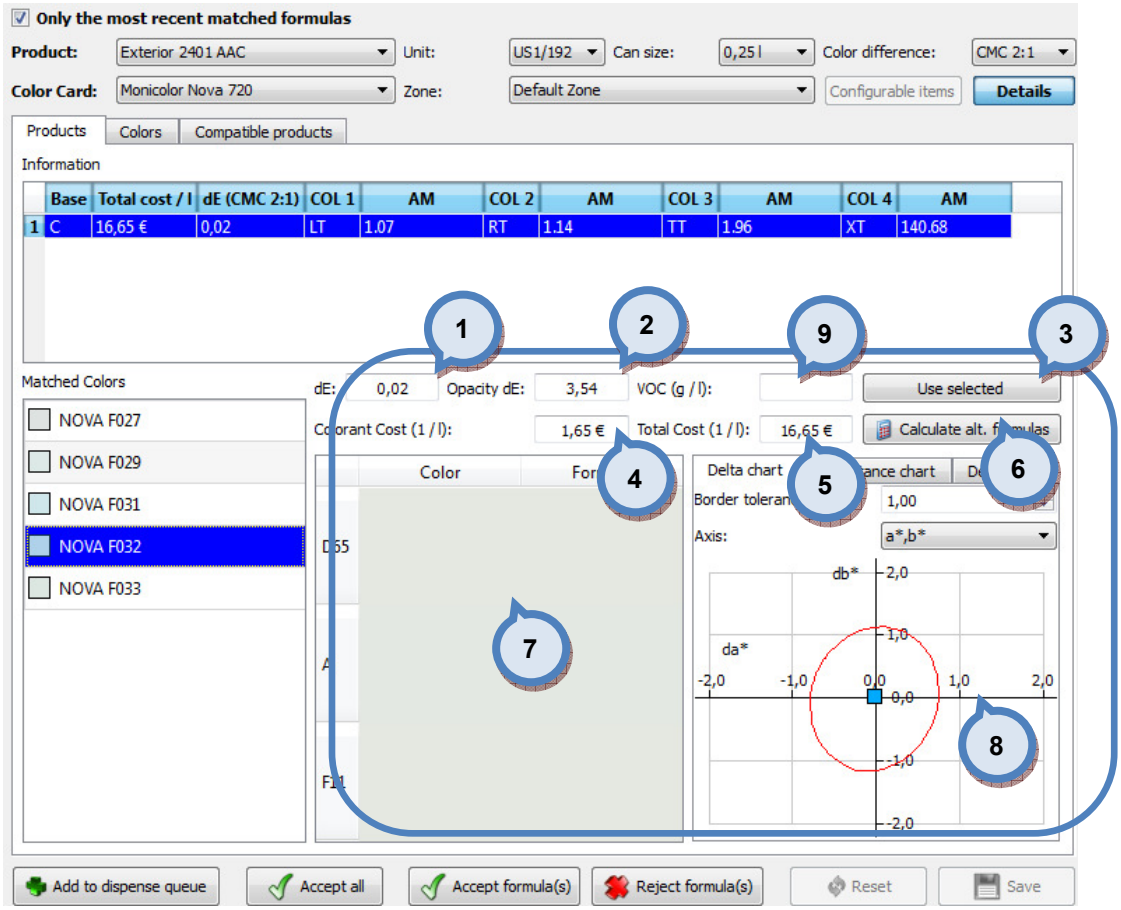
Note: Items displayed on this section are depending on choices made on the configurable items section.

When **Details** button is clicked, following items are available on the **Matched colors** section:



1.Matched colors: The table to show the list of matched colors.

When **Details** button is clicked, following items are available on the **lower right hand side** section:



1.dE: The text field to display the calculated color difference between target and matched color formula, using CMC 2:1 equation

2.Opacity dE: The text field to display the calculated color difference between color over white and color over black substrate of the matched color formula, using CMC 2:1 equation.

3.Use selected: The button to select the selected matched formula for use.

4.Colorant cost: The text field to display the colorant cost of the formula. Unit of measure is currency unit used / litre

5.Total cost: The text field to display the total cost of the formula. Unit of measure is currency unit used / litre.

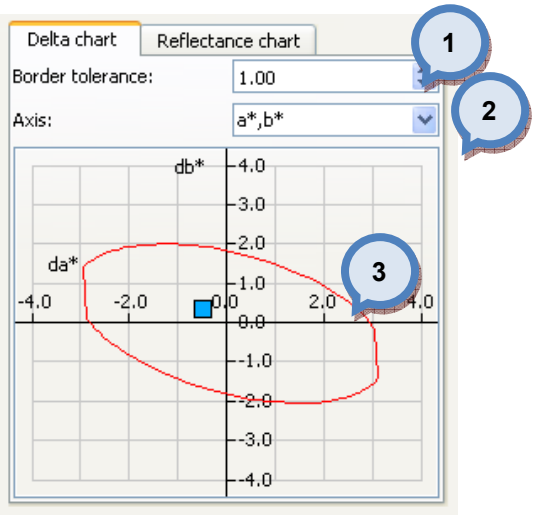
6.Calculate alternative formulas: The button to recalculate color formula.

7.The table to display visually the color difference by using different lights (D65, A, F11). Target color is displayed on the Color column, and calculated color based on the matched color formula is displayed on the Formula column.

8.The window to display matched color and the color tolerance area on the color difference chart and the reflectance chart. See next page for further details on this section.

9. VOC (g/l): Amount of VOC components in the selected formula

On the **color difference** (delta chart) **/ relectance** chart / details you have three tab pages with following options:



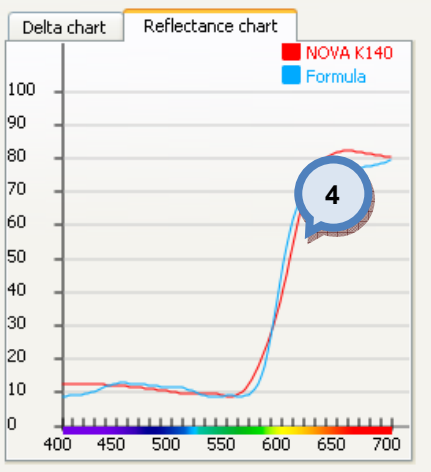
On the **Delta chart**, you have following options:

1.Border tolerance: The drop down list to select tolerance for border line.

2.Axis: The drop down list to select axis for the chart. Options are: (a*, b*), (L*, a*), and (L*, b*).

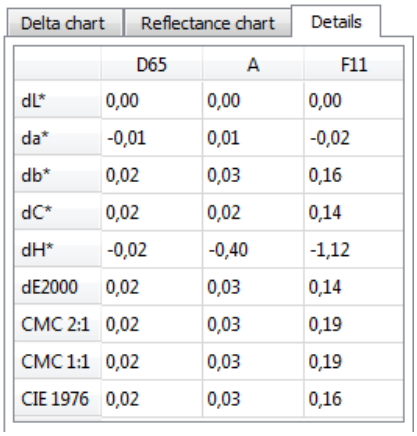
3.The chart to display the matched color and the tolerance window.

On the **Reflectance chart**, you have following options:



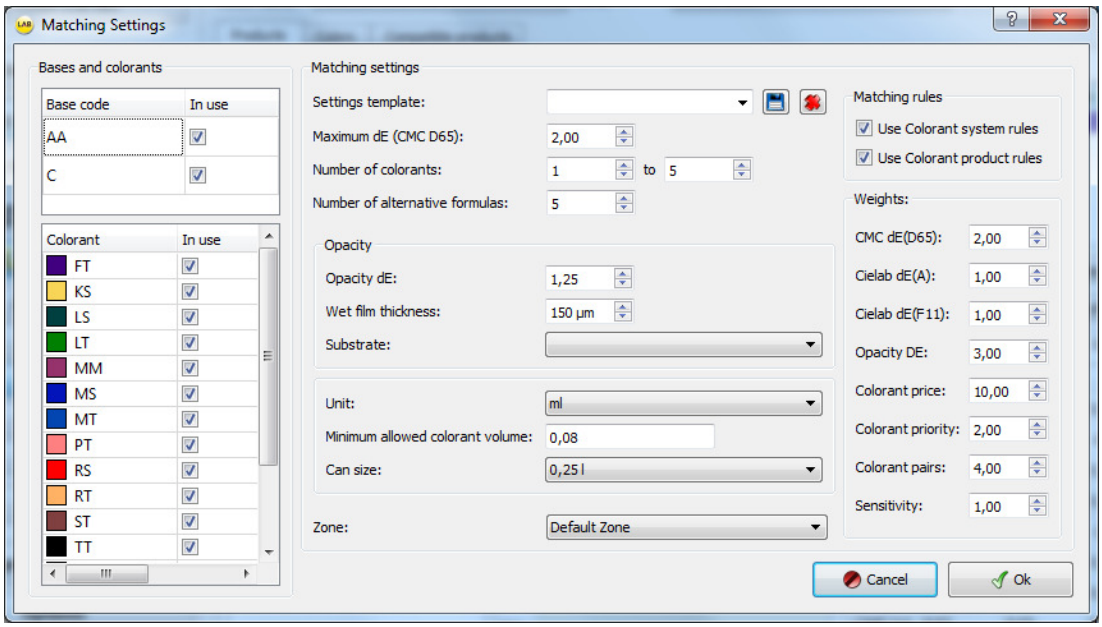
4.The chart to display the reflectance values for both matched color and the target.

On the **Details chart**, you have selected coloristic values displayed in table format.

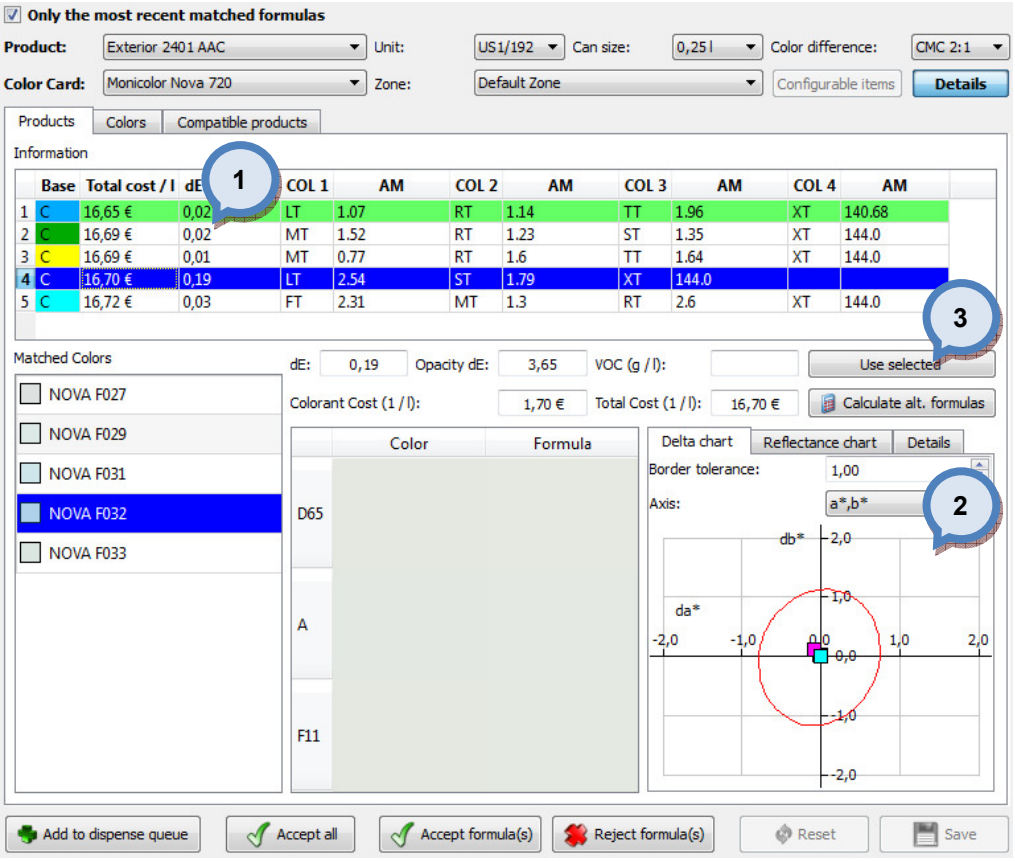


	D65	A	F11
dL*	0,00	0,00	0,00
da*	-0,01	0,01	-0,02
db*	0,02	0,03	0,16
dC*	0,02	0,02	0,14
dH*	-0,02	-0,40	-1,12
dE2000	0,02	0,03	0,14
CMC 2:1	0,02	0,03	0,19
CMC 1:1	0,02	0,03	0,19
CIE 1976	0,02	0,03	0,16

When **Calculate alternative formulas** button is clicked, matching setting window opens up



and after matching the following window opens up

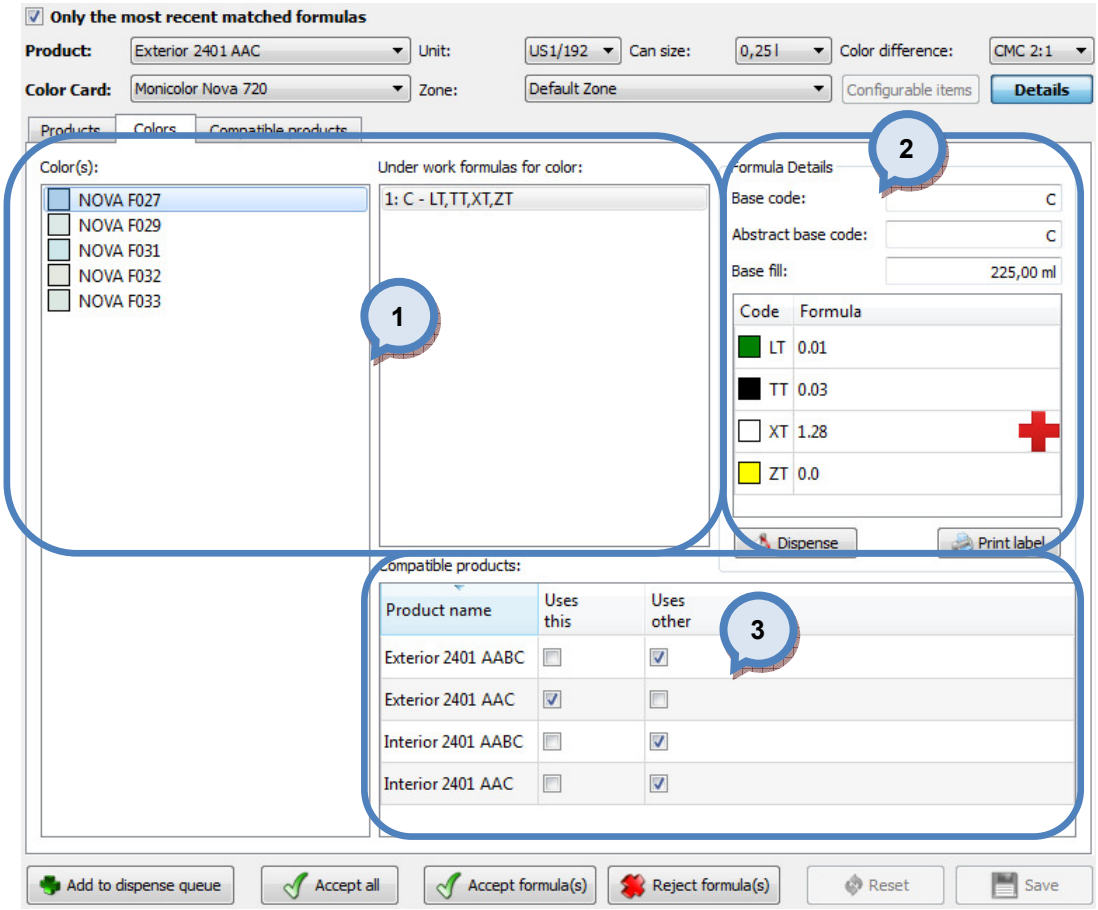


1.Information: The alternative color formula are displayed on the table. One highlighted green, is the chosen formula. One highlighted blue, is the one under evaluation (see point 3).

2.The colors of the alternative formula are displayed on the graphs.

3.Use selected: will change the formula

Colors tab is made to speed up process of assigning formulas to multiple products at one time. On the **Colors tab** page, you have the following items available:

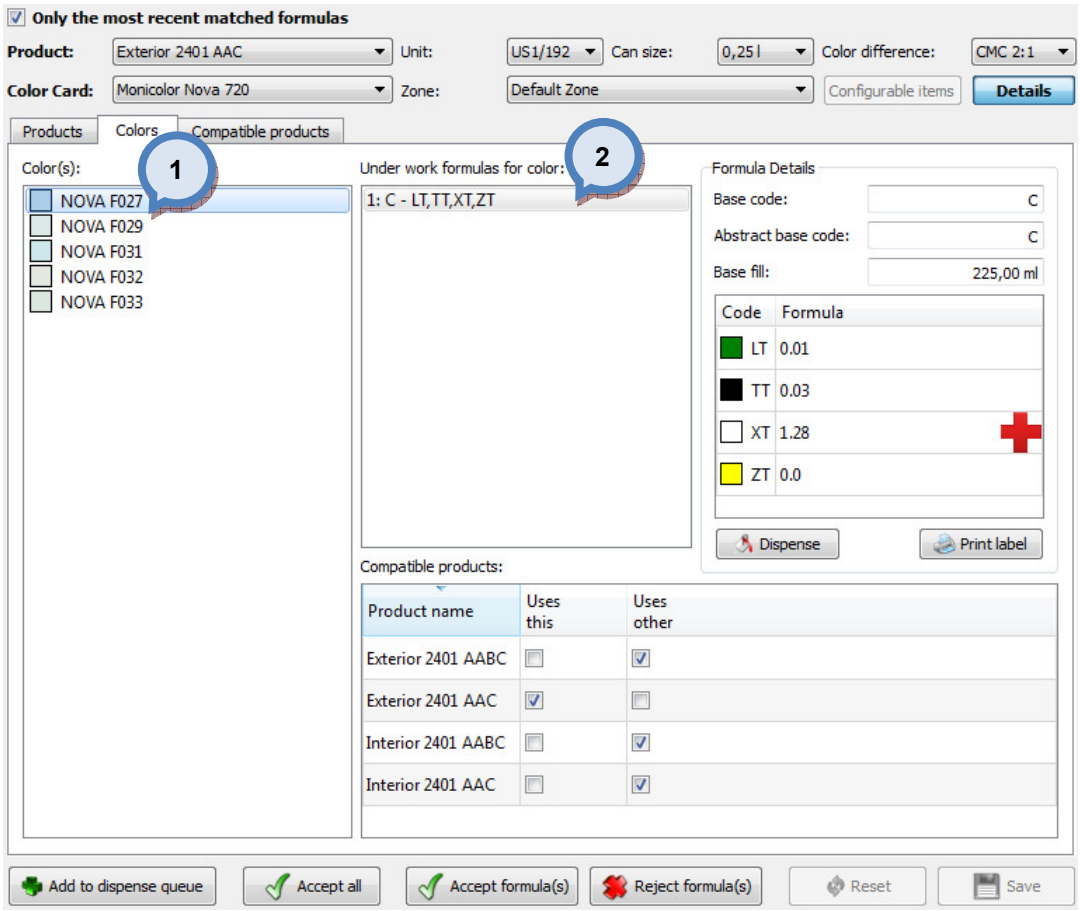


1.Color(s): Matched colors and formulas linked to them

2.Formula details: Detailed information about selected formula.

3.Compatible products: Alternative products, which could use the same formula.

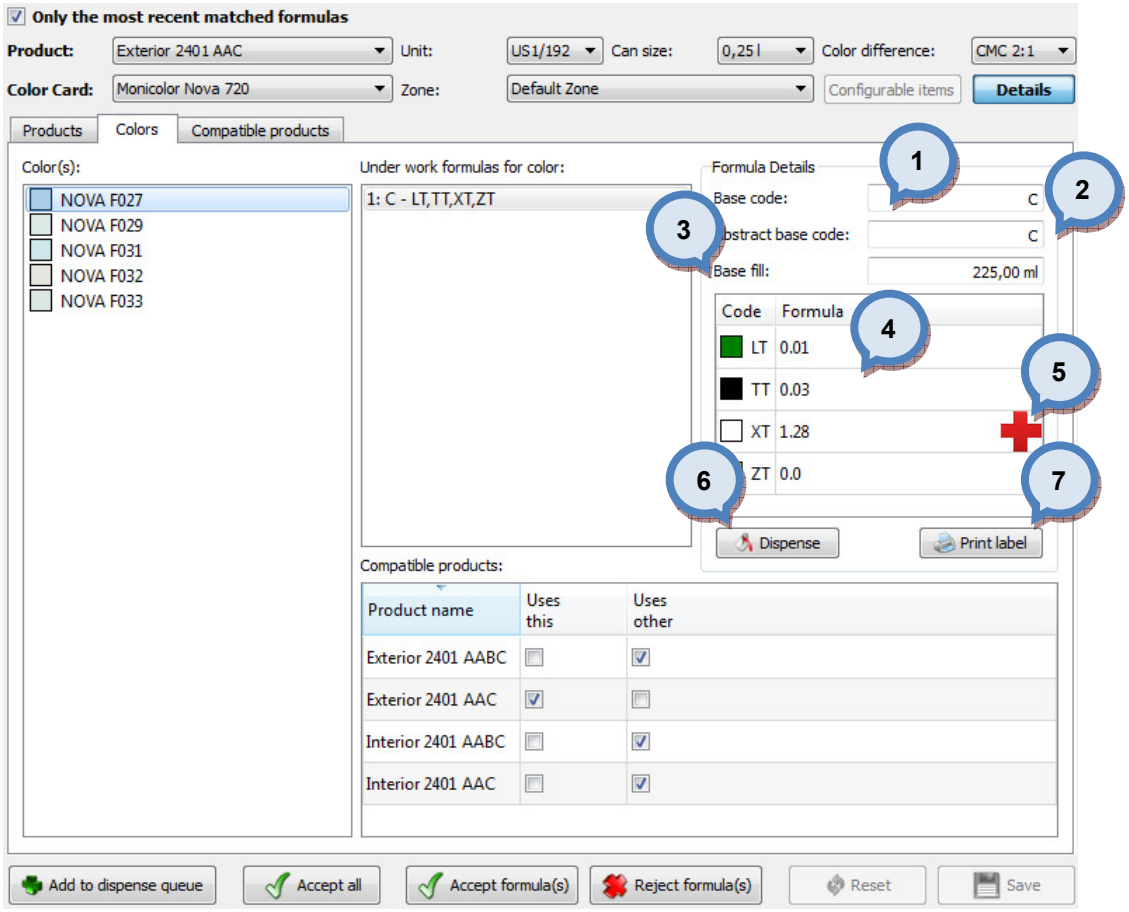
The following options are available on the **color(s) area**:



1.Color(s): Color that has been matched

2.Under work formulas for color: This list contains all the formulas matched for the selected color.

The following options are available on the **Formula details** area:



1.Base code: Base code of the formula

2.Abstract base code: Abstract base code of the formula

3.Base fill: Amount of the base material in the can

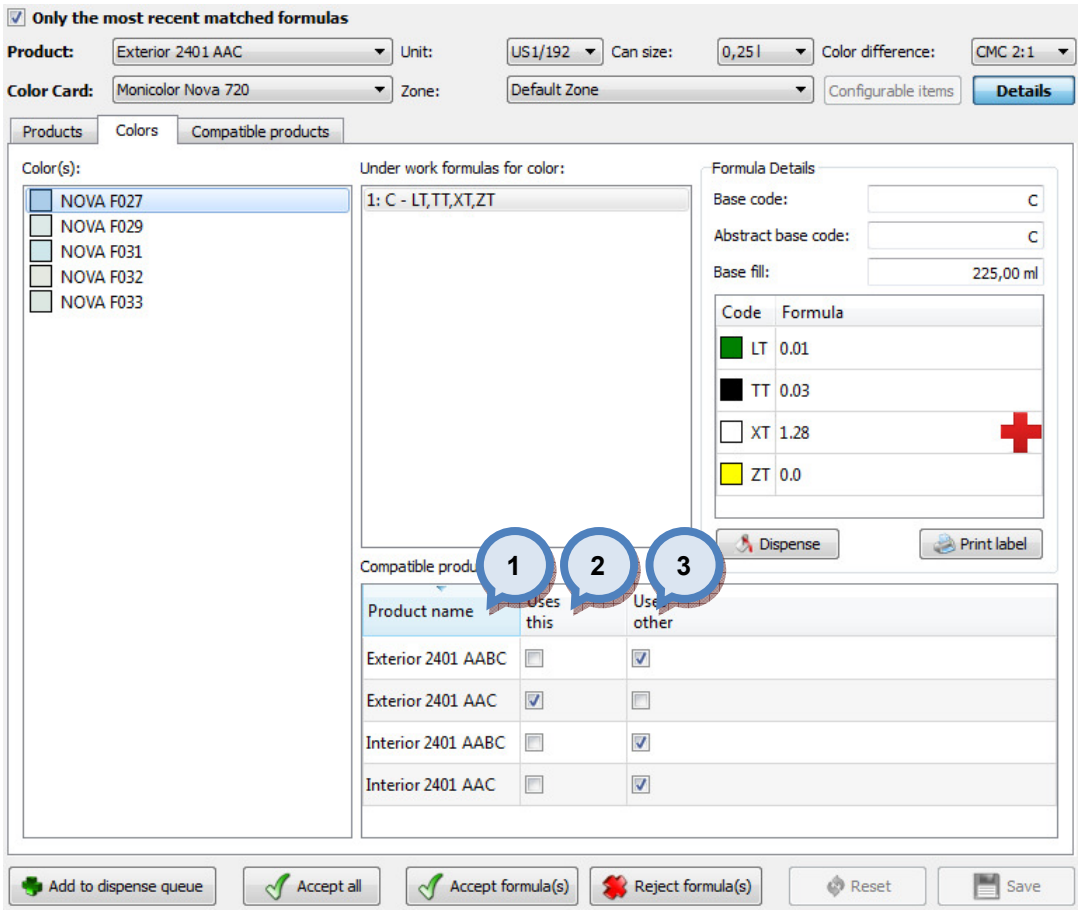
4.Formula: colorant component and their amounts

5.Formula warnings: Warning messages if the formula violates matching rules

6.Dispense: The button to dispense formula (requires tinting machine)

7.Print label: The button to print label

The following options are available on the **Compatible product** area:

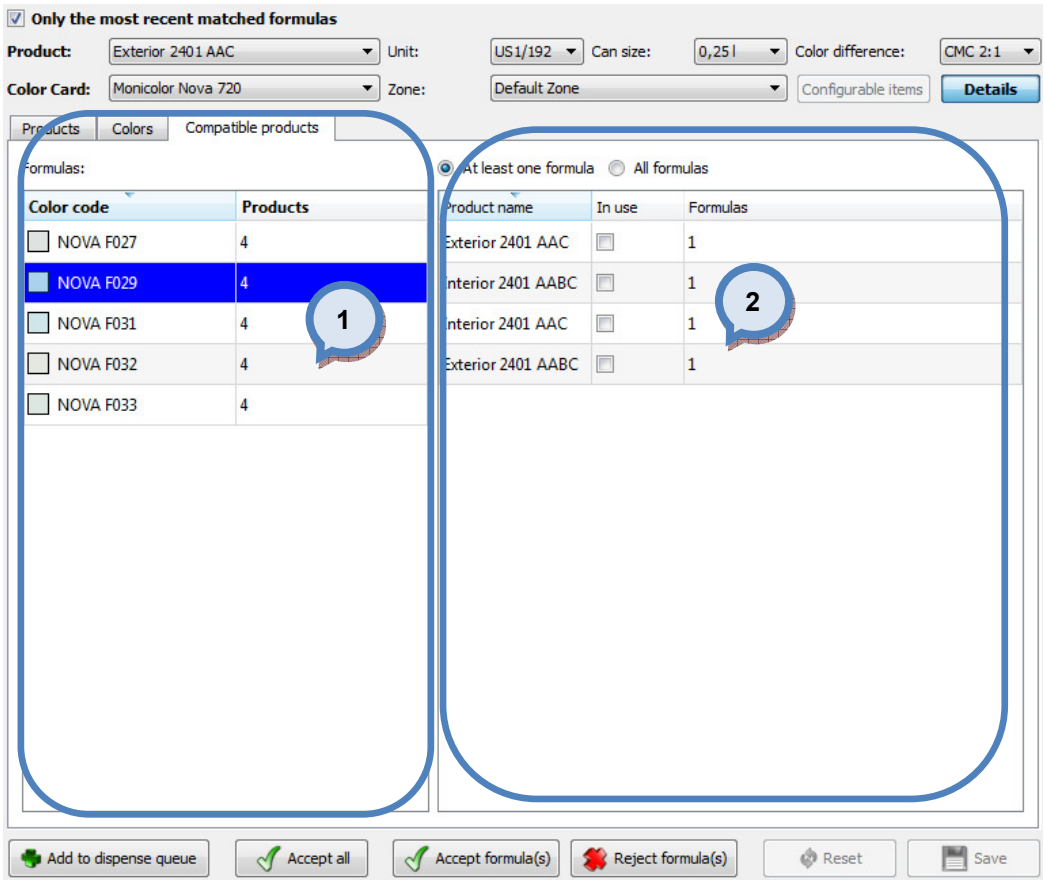


1.Product name:Color(s): Product name to which formula selection can be made.

2.Uses this: Check box is enabled if the product uses selected formula.

3.Uses other: Check box is enabled if the product uses some other formula than the selected.

On the **Compatible products tab** page, you have the following items available:



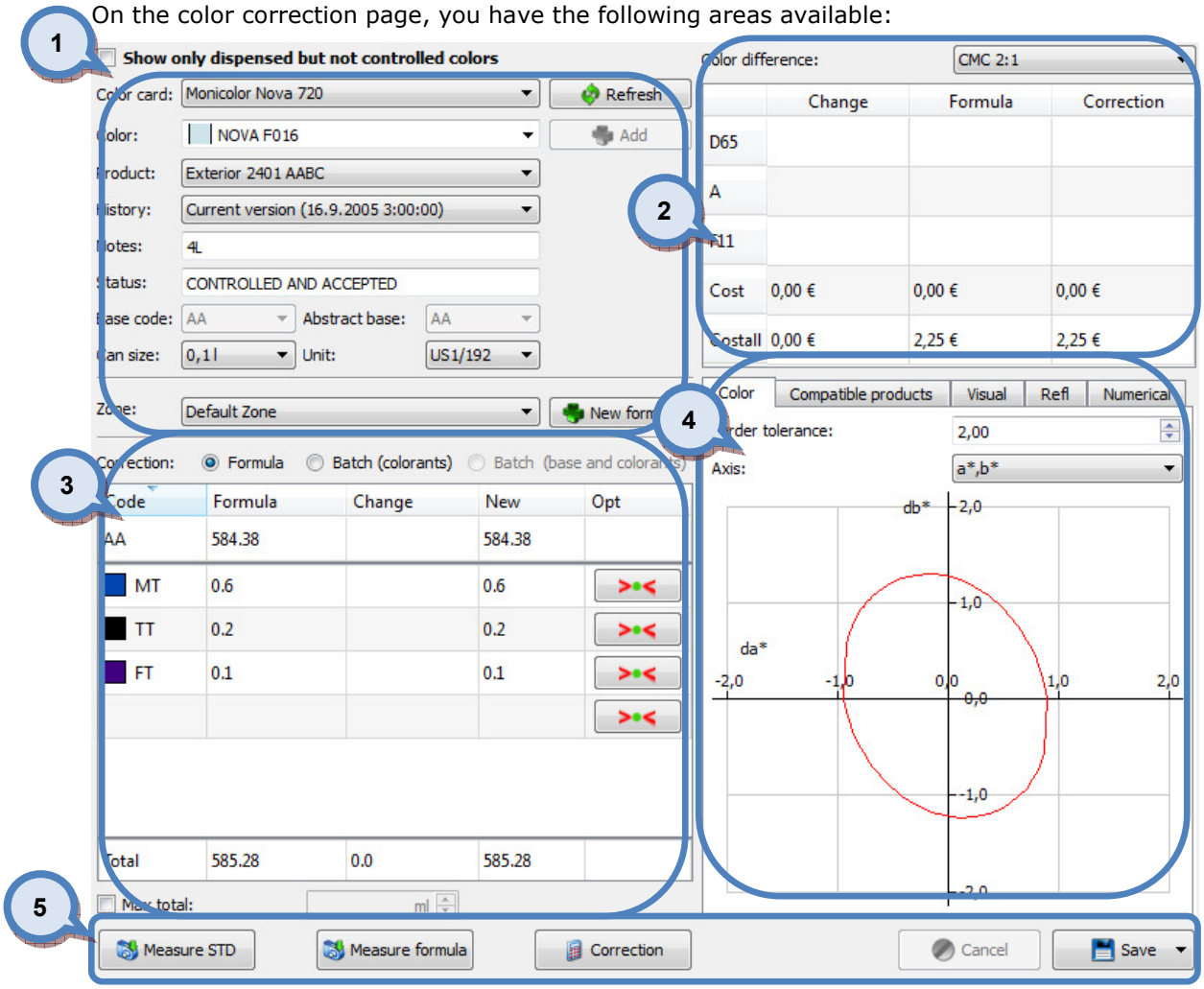
1.Formulas: Color and number of products having a formula available.

2.Details: Products using the selected color and formulas linked to it.

3.3.4 Color correction

In the Color correction page, you can view color details, and make color correction on color formula or batch of tinted paint.

On the color correction page, you have the following areas available:



1.Color Selection area:

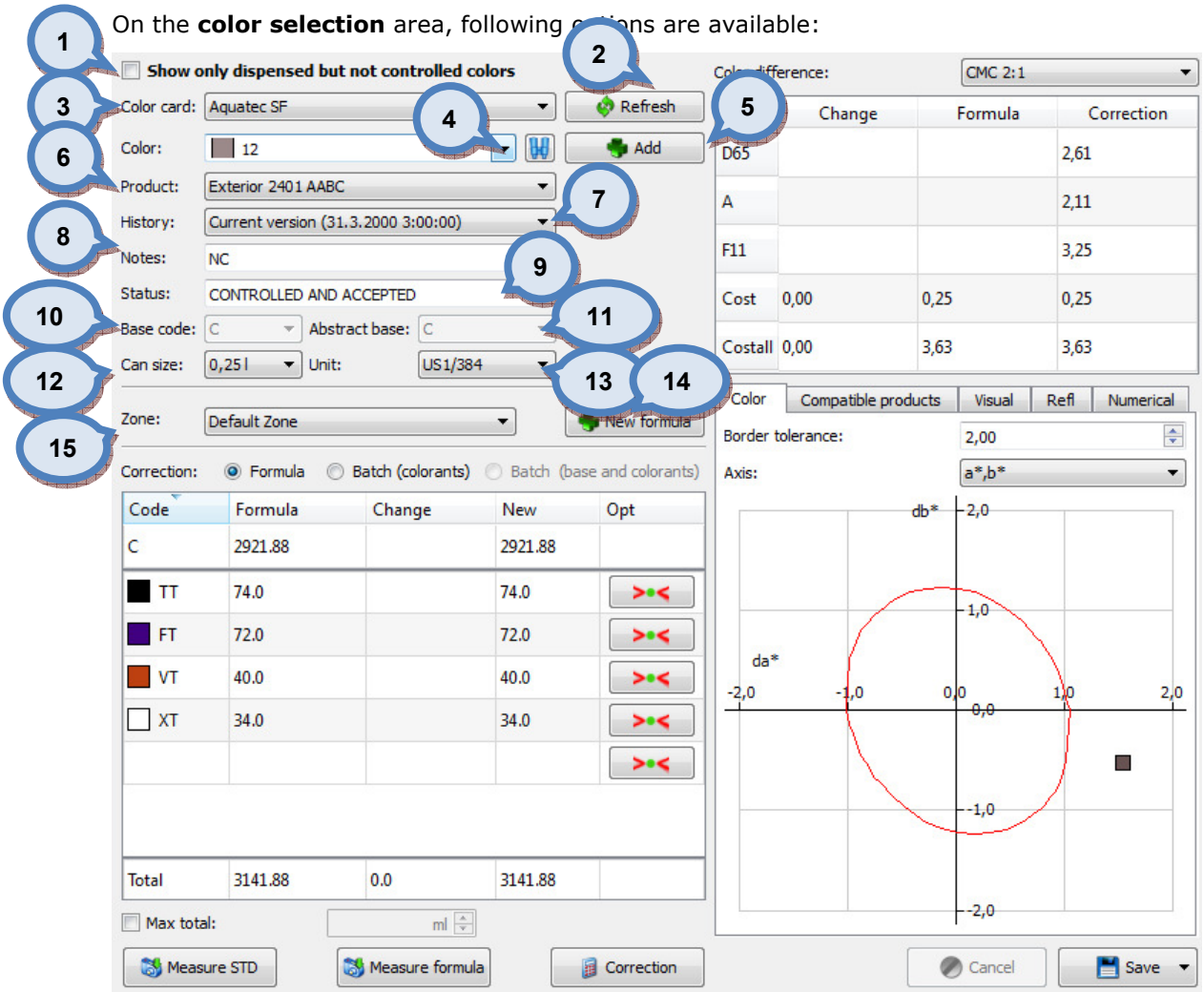
2.Color Difference table:

3.Color Correction:

4.Color details tabs:

5.Color measurement and approval:

On the **color selection** area, following options are available:



1.Show only dispensed, but not controlled colors: If the check box is on, only formulas with "control" status shown.

2.Refresh: The button to clear the view

3.Color Card: Dropdown list to select color card

4.Color: Dropdown list to select color. Works also as text field to search colors (click on the search icon to activate search)

5.Add:

6.Product: Dropdown list to select the product

7.History: Dropdown list to select version of the formula. Options are, If available, Current version, LAB history

8.Notes: text field for formula comment

9.Status: Status of the formula, possible statuses are:

Review: Default status for new formula

Accepted: The status for the formula which has not been dispensed, and has been accepted without review with real drawdown. The formulas that are imported from the external file or the database without any status, will have this status.

Dispense: The status for the formula which is placed in to the dispensing queue.

Control: The status for the formula which is dispensed and is waiting to be accepted or rejected.

Controlled and accepted: The status for the formula which is dispensed and after review it has been accepted.

Rejected: The status for the formula which has not been dispensed, and has been rejected without review with real drawdown.

Controlled and rejected: The status for the formula which is dispensed and after review it has been rejected.

10.Base code:

11.Abstract base:

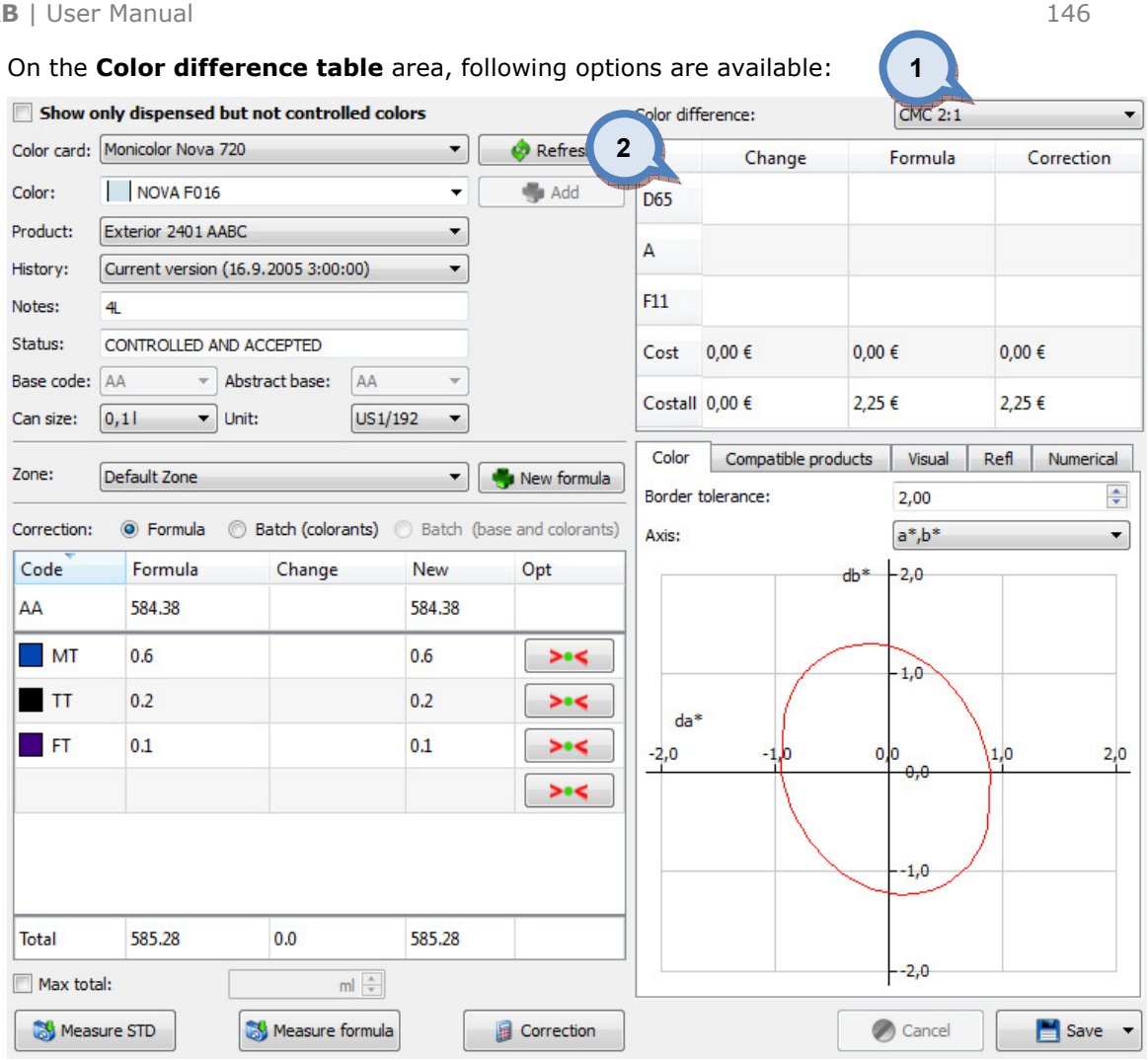
12.Can size: Dropdown list to select can size

13.Unit: Dropdown list to select unit of measure

14.New formula: The button to create new formula

15.Zone: Dropdown list to select zone

On the **Color difference table** area, following options are available:

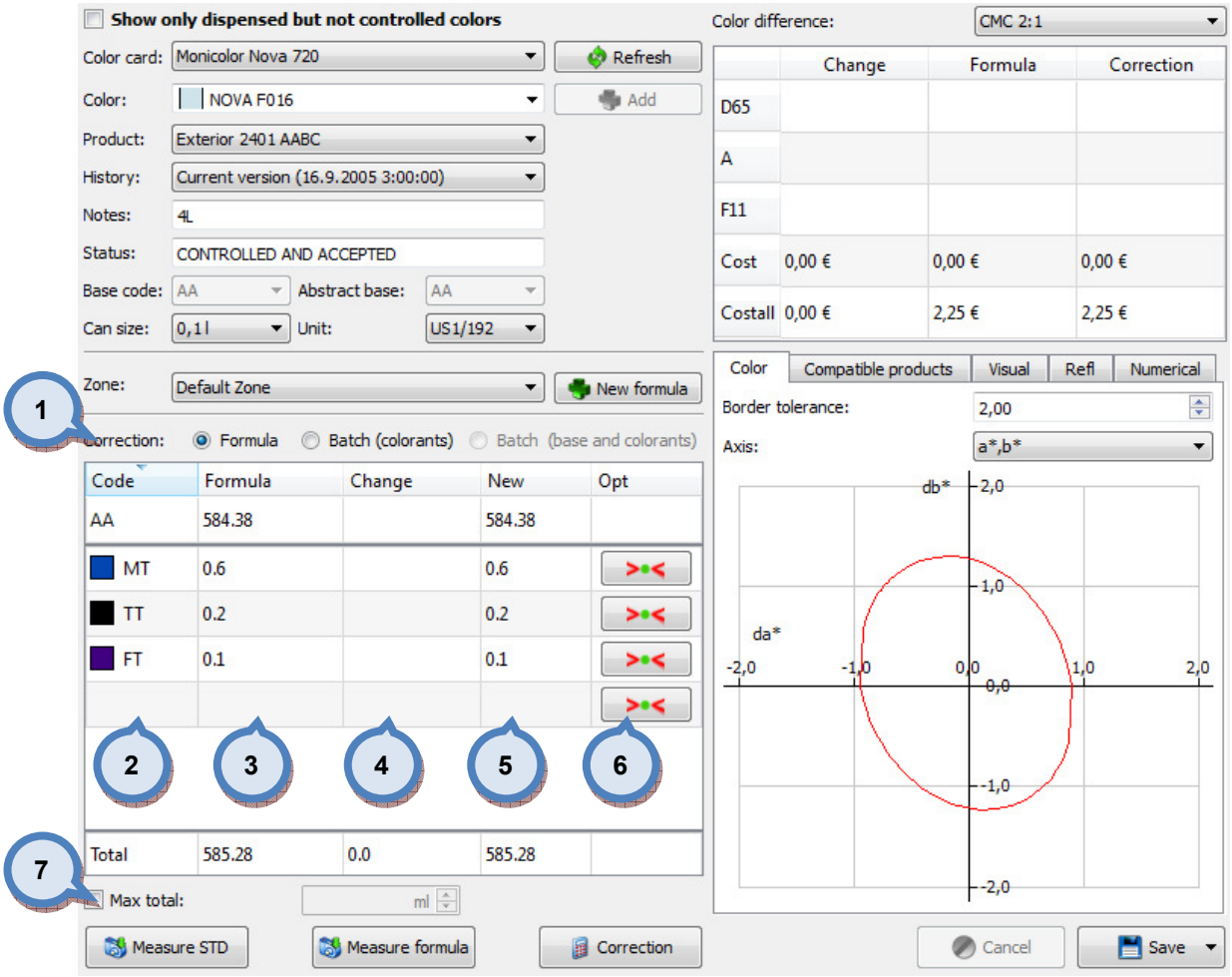


1.Color difference: Dropdown list to select color difference equation. Possible options are:

- de2000
- CMC 1:1
- CMC 2:1
- CIE 1976

2.Color Difference table: Table to present basic information about the formula and its correction. Color difference is shown in three different light sources and Cost=colorant cost, Costall = colorant +base cost.

On the **Color correction** area, following options are available:



1.Correction: Radio buttons to select type of correction method. Options are Formula and Batch (not to increase colorant volumes)

2.Code: Compenent of the formula, base(s) and colorants. Click on the cell will open dropdown list to select alternative colorants.

3.Formula: Current formula

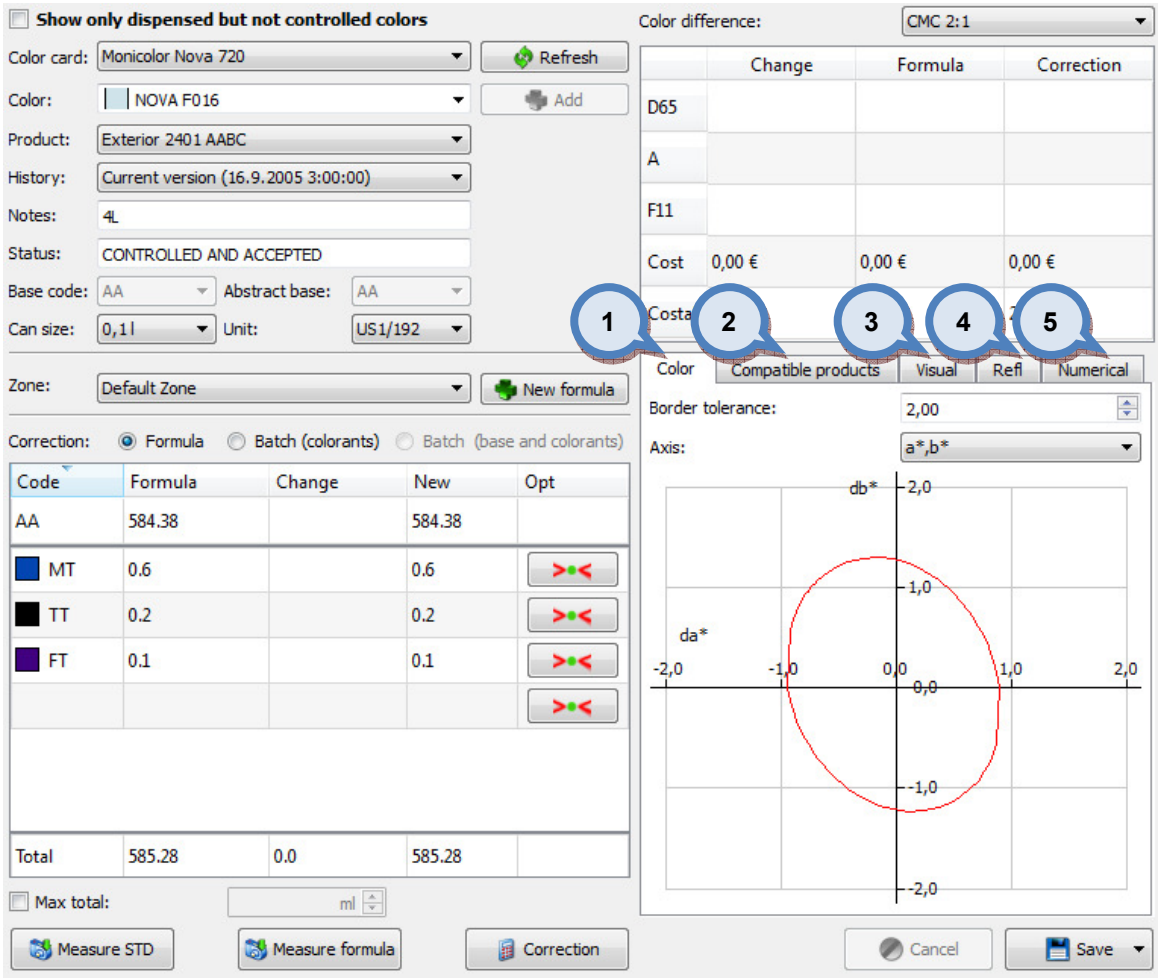
4.Change: Change of the formula (either by correction or manual change)

5.New: New formula, the sum of Formula (3) and Change (4)

6.Opt: Button to optimize formula based on selected colorant (correction must have been done first)

7.Max total: Threshold value not to exceed during the correction.

On the **Color details tab** area, following tab-pages are available:



1.Color:

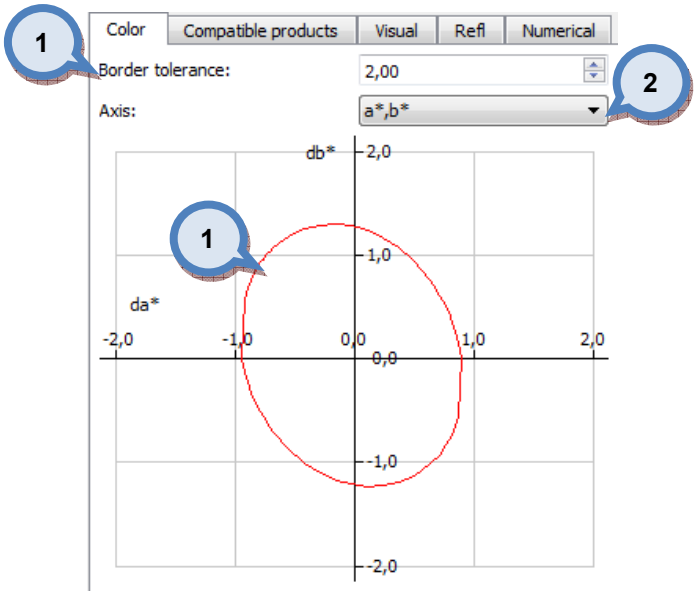
2.Compatible products:

3.Visual:

4.Refl:

5.Numerical:

On the **Color tab**, following options are available:

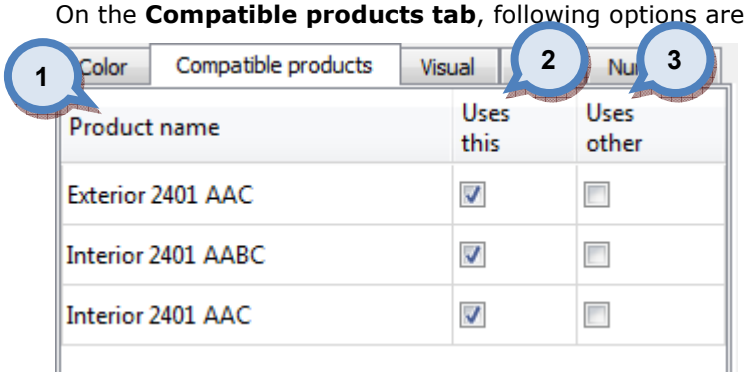


1.Border tolerance: limit to display on the chart. Anything within the border are "acceptable"

2.Axis: Dropdown list to select the view for the below chart. Possible axes to choose from are:

- a*, b*
- L*, a*
- L*, b*

On the **Compatible products tab**, following options are available:

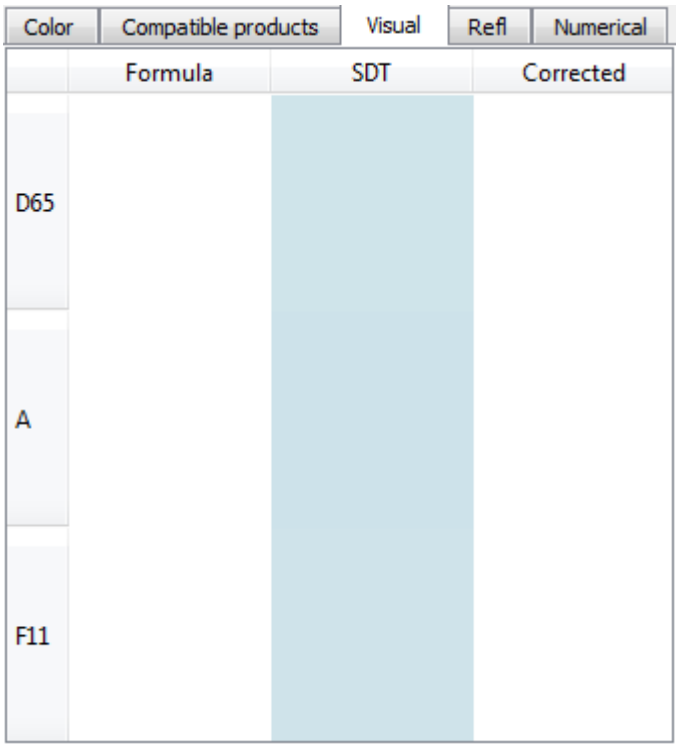


1.Product name: The list of the compatible products i.e. Shares the same Abstract base.

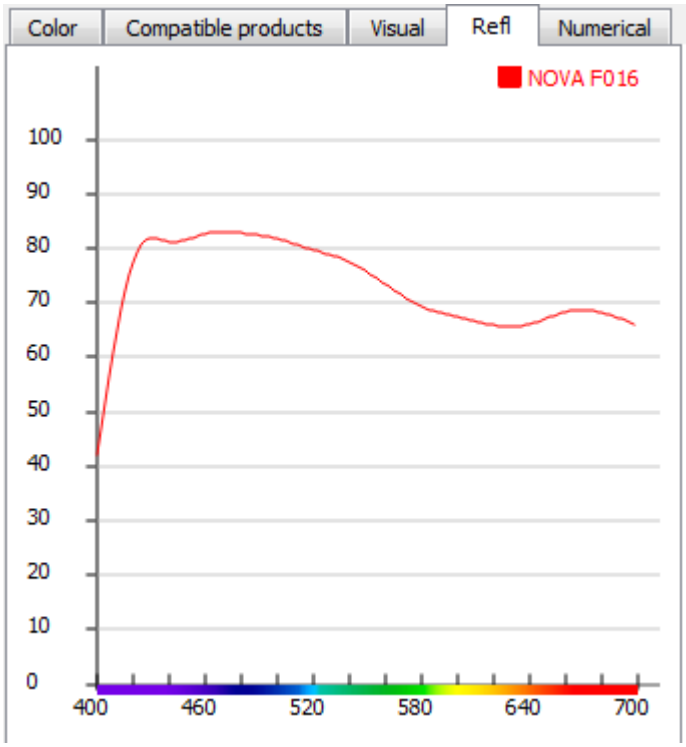
2.Uses this: When check box is enabled product is using selected formula.

3.Uses other: When check box is enabled product is using other than selected formula.

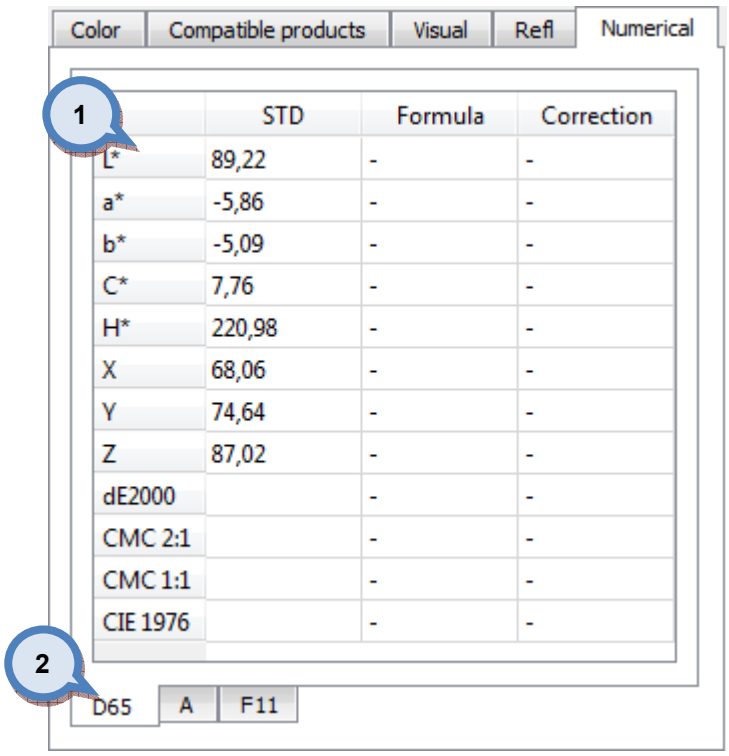
On the **Visual tab**, RGB representations of the Formula, standard and Corrected formula in multiple light sources is shown. Light sources are Daylight (D65), Incandescent (A) and Fluorescent (F11) following tab-pages are available:



On the **Refl tab**, reflectance view is shown: It displays, if possible, reflectance curve of the formula, standard and corrected formula.



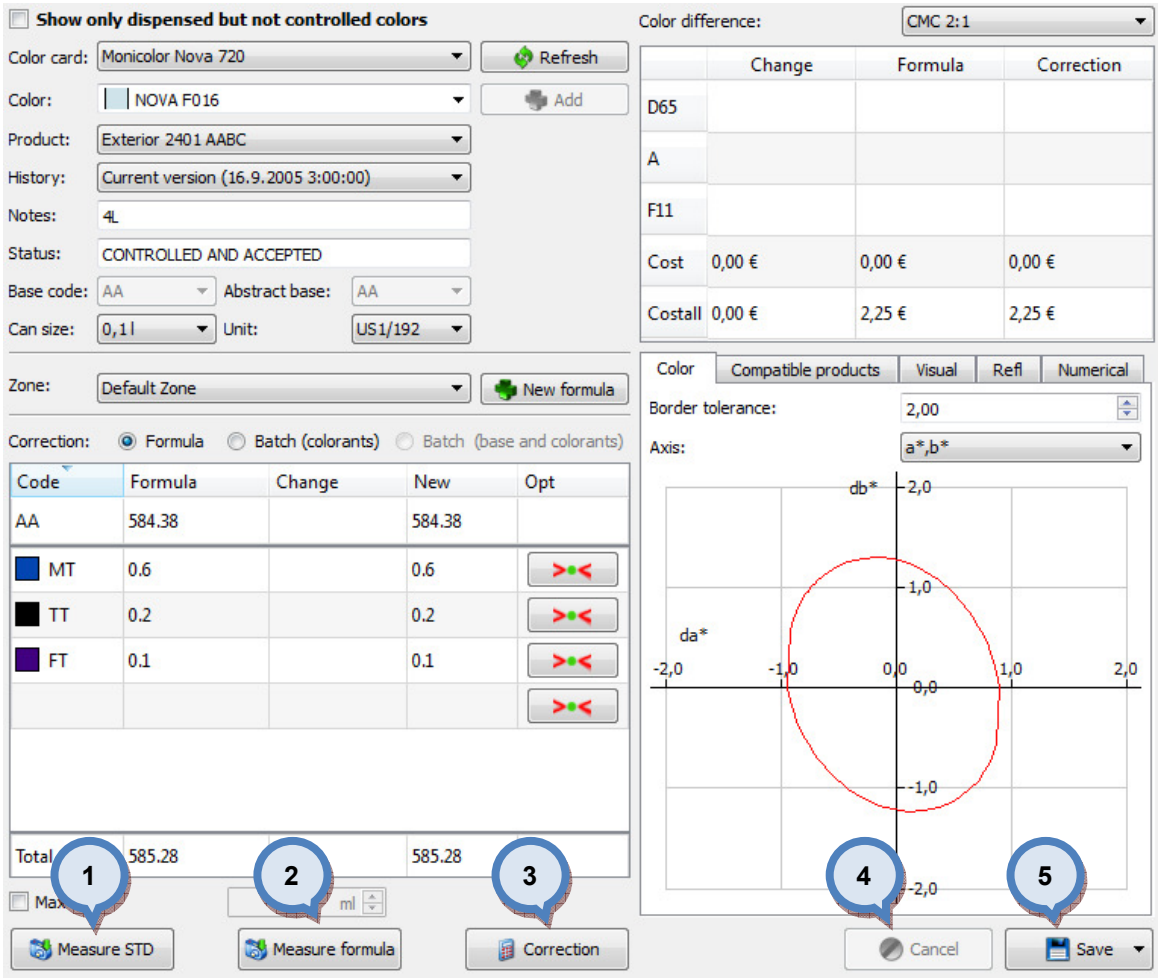
On the **Numerical tab** area, following options are available:



1.Color difference table: Coloristic values of the Standard, formula and corrected formula. Formula and Corrected formula are presented as difference to the standard.

2.Light sources: Tabs to select light source to view detailed color differencies.

On the **Color measurement and approval** area, following options are available:



1.Measure STD: The button to measure standard. If the standard hs measured in, it's not mandatory to measure it again.

2.Measure formula: The button to measure formula.

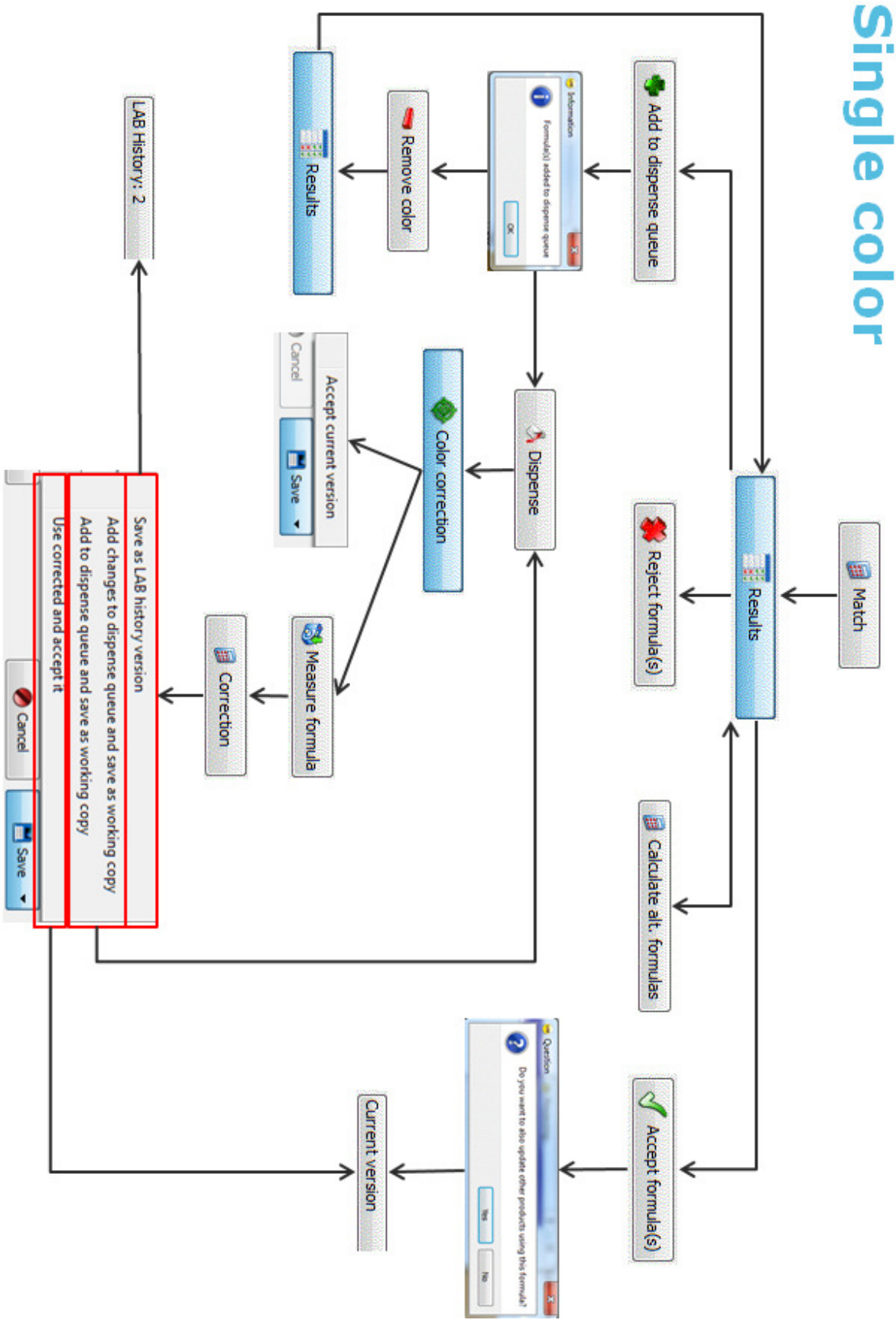
3.Correction: The button to calculate correction to the formula

4.Cancel: The button to cancel all the changes for the formula

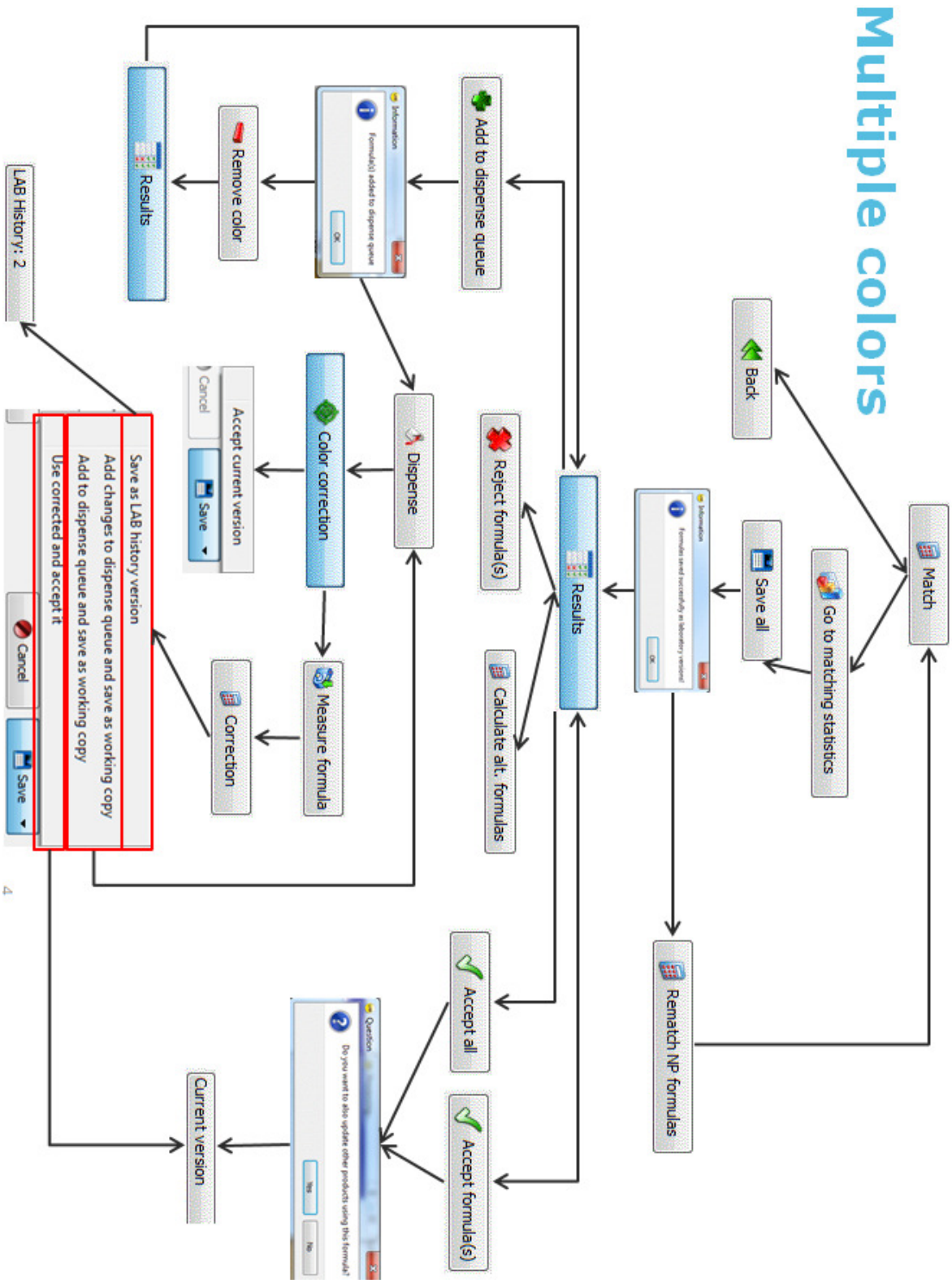
5.Save: The button to save the formula. Save button has following options.

- Save as LAB history version
- Add changes to dispense queue and save as working copy
- Add to dispense queue and save as working copy
- Use corrected and accept it.

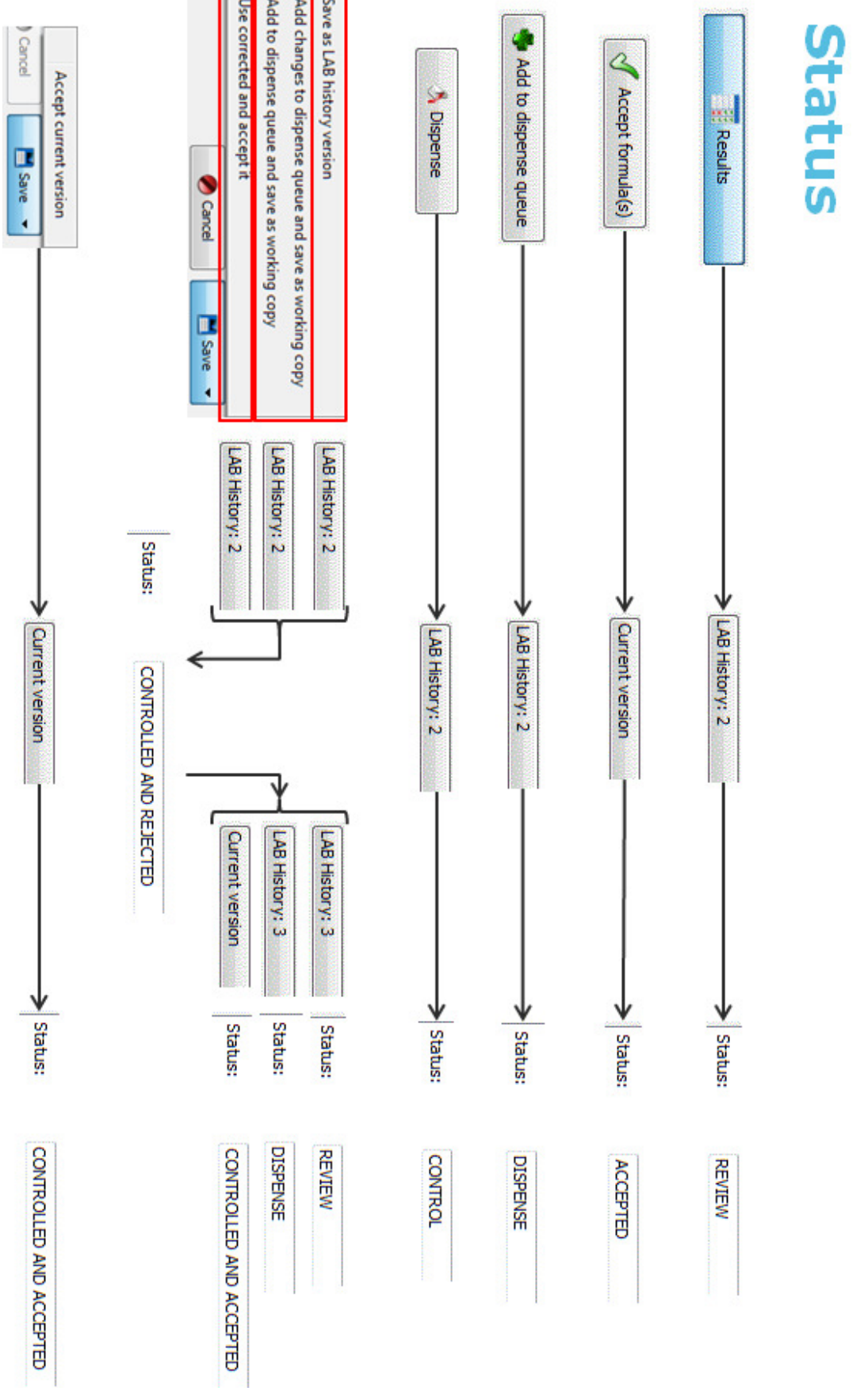
Flow chart of matching single color



Flow char of matching multiple colors



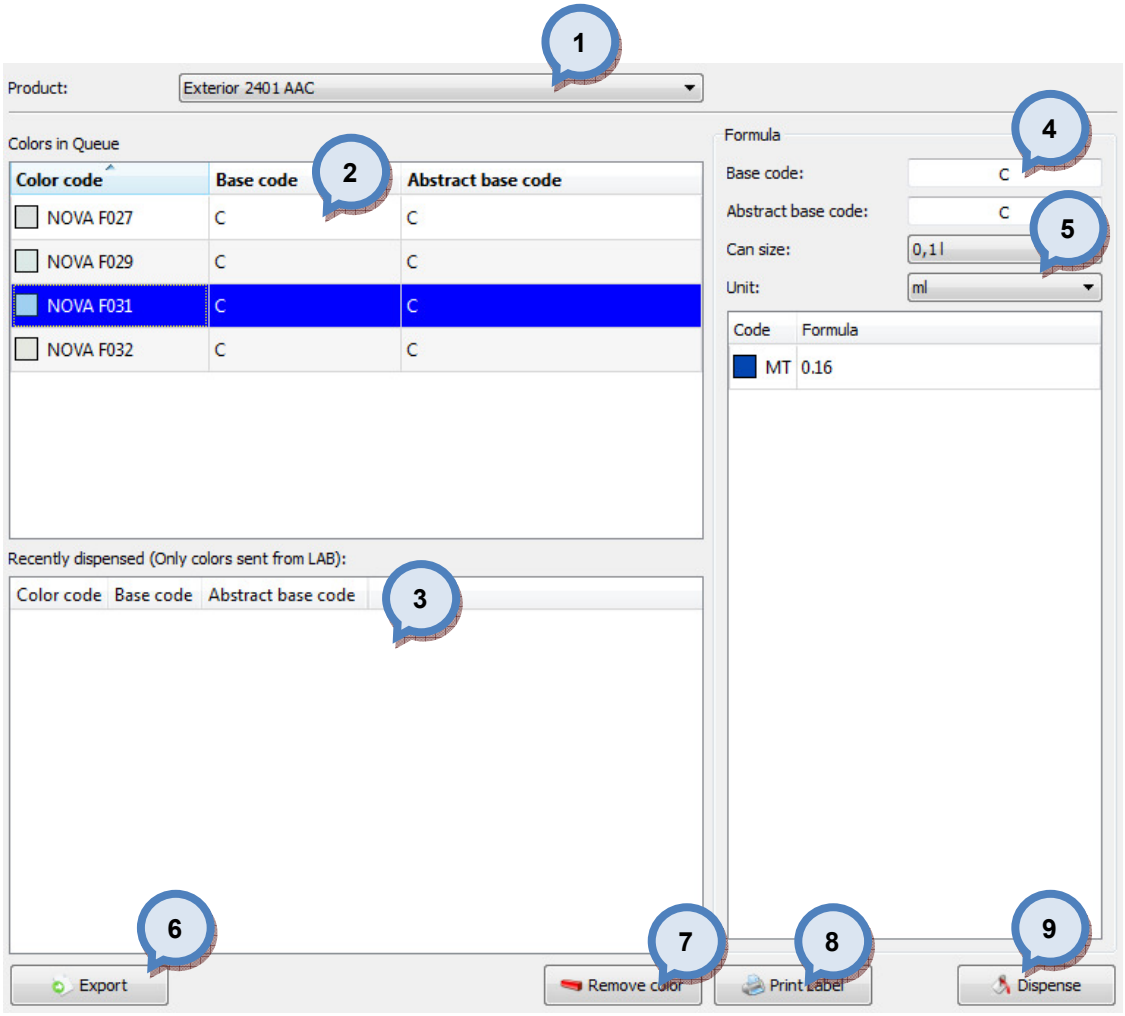
Different statuses



3.3.5 Dispense queue

In the **dispense queue** page, you can see all colors ready to be dispensed.

In the **dispense queue** page, you have the following options available:



1.Product: The drop down list to select the product.

2.Colors in queue: The list of formula on the dispensing queue.

3.Recently dispensed: The list of the previously dispensed formula from the LAB program.

4.Formula: The text boxes to display base code and abstract code of the formula selected.

5.Can size and Unit: The drop down lists to select can size for dispensing and unit for display.

6.Export: The button to dispending queue info into the text file.

7.Remove color: The button to remove a formula from the dispensing queue.

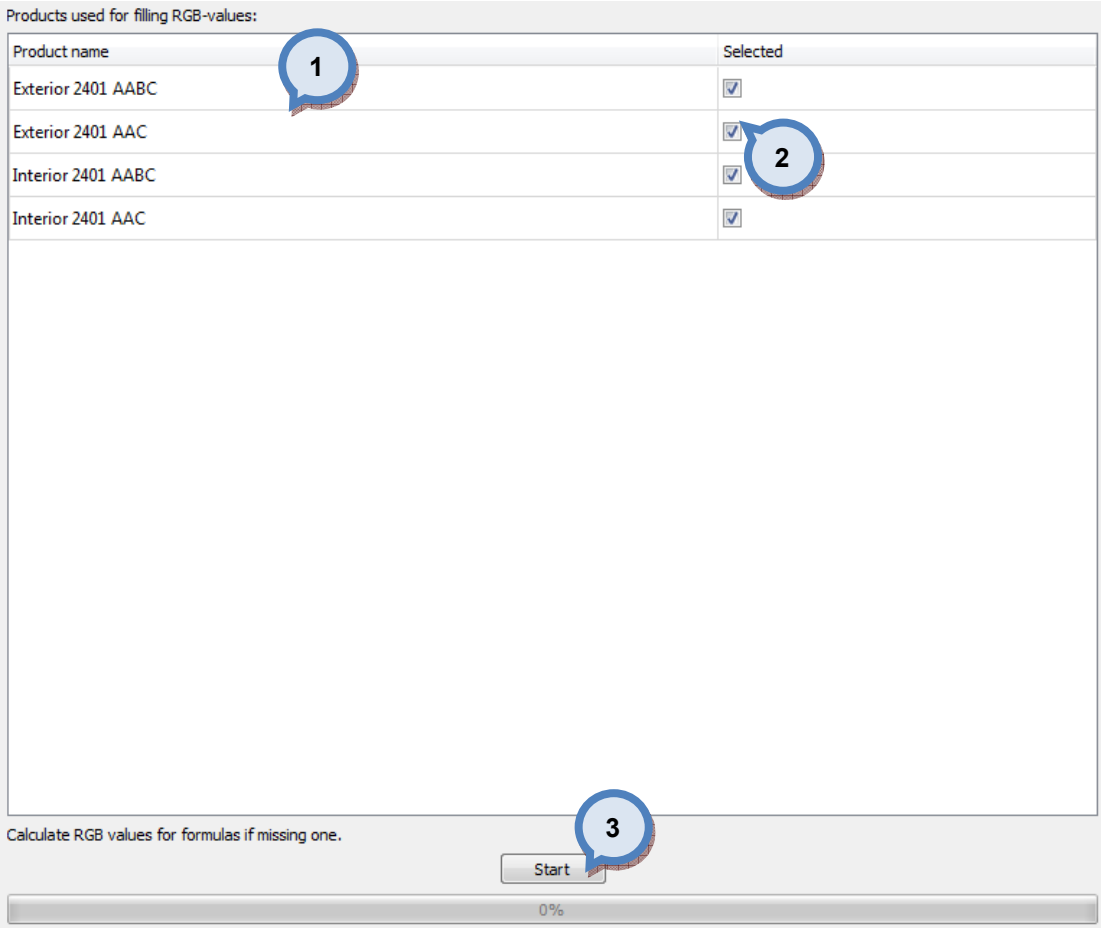
8.Print label: The button to print a label for selected color formula.

9.Dispense: The button to start dispensing process.

3.4 Fill RGB(s)

In this page you can calculate RGB values for the not measured formulas by using the product characterization data. This function is used to display the formula color in the Basic and the professional versions when the matching engine is not used.

In the **Fill RGB(s)** page, you have the following options available:



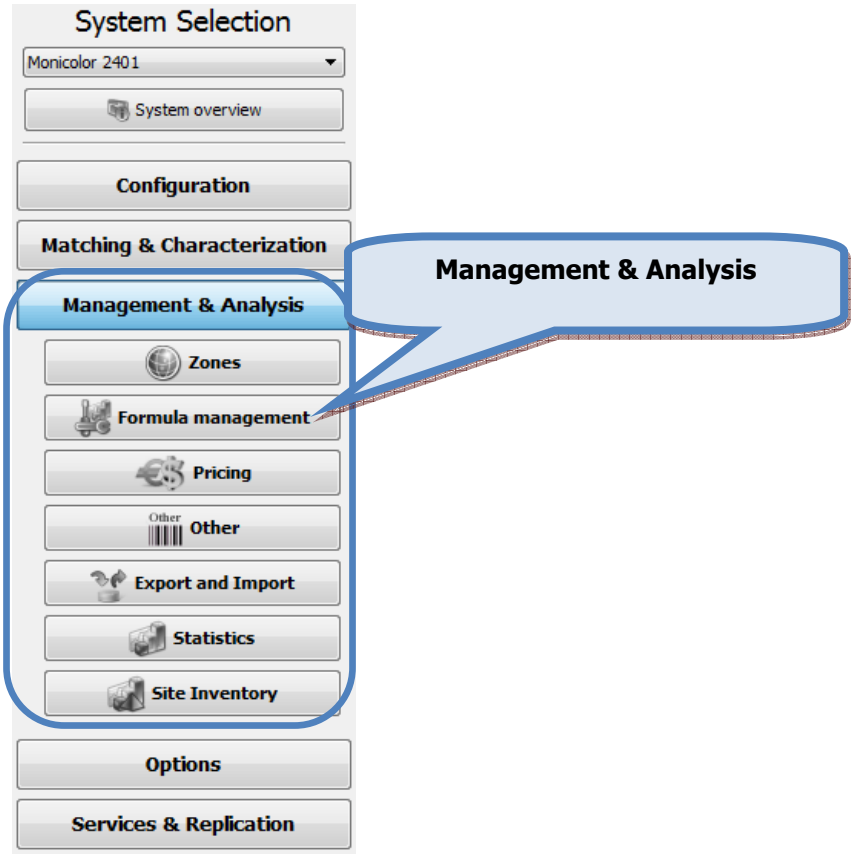
1.Product: The list of the products.

2.Selected: When the check box is enabled, this product is used to calculate the RGB values for the formulas missing color data.

3.Start: The button to start the calculation.

4 Management & Analysis

In Management & Analysis section, you can make zone configurations, view and edit formulas, set pricing, manage bar codes, execute data import and export, and to view statistics of your activities**.**



4.1 Zones

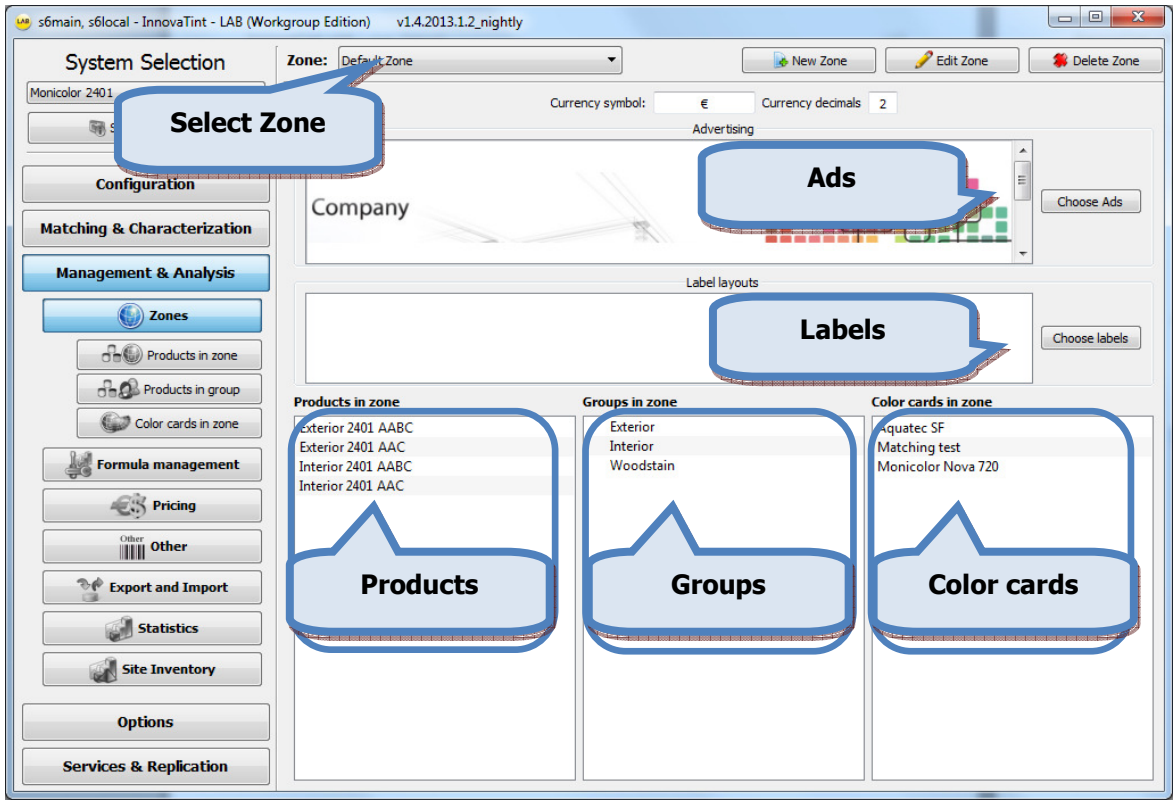
To make zone configurations, navigate into the **Management & Analysis ⇨ Zones** page.

In Zones page you can:

- Create and edit zone names
- Edit currency symbols and decimals used in zones
- View products, groups, and color cards in zones
- Add an advertizing material to be shown in the POS software
- Control labels

Zones page has three sub pages, in which you can:

- Set products to zones
- Set groups to zones
- Set color cards to zones

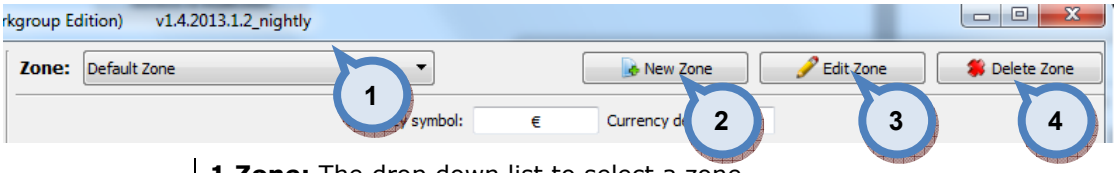


With zone function, you can create combinations of products, colorants, and color cards to be used in predefined zones. When predefined zone is selected for Innovatint Shop installation package, user cannot see other products, colorants, or color cards, which do not below to this zone. This function allows you to create pre-set combinations for resellers, distributors, as well as for individual POS agents. You can also give alternative names of the products, colorants, and color cards (and colors within color card), to be used in zones in this section. For all components, you can also set different pricings, and currency based on zone.

Note that database must include at least one zone, i.e. default zone, but there is no upper limit for the maximum number of zones.

Zones can also be set by a paint company. And zone setup can be done based on geographical location or by customers. And finally, zones do not have any internal hierarchy among others.

In the upper part of the **Zones** window (and all sub pages under Zones), you have the following options available:



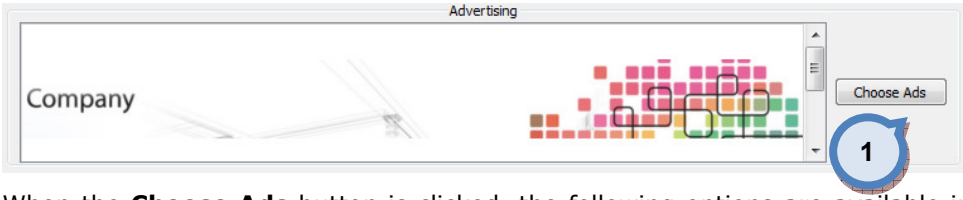
1.Zone: The drop down list to select a zone.

2.New Zone: The button to create a new zone (name).

3.Edit Zone: The button to edit the name of a zone (selected from the zone list (1).

4.Delete Zone: The button to delete the name of a zone (selected from the zone list (1).

The advertising material or banners for the POS software can be set with the Choose Ads button (**1**).



When the **Choose Ads** button is clicked, the following options are available in the Advertising window:

1.Add image: The button to add new pictures in to the picture browser list.

2.Change image: The replace a main banner picture with new picture.

3.Delete image: The button remove a picture from the picture browser list.

4.The arrow buttons to set the order of the pictures in the list. The order of the pictures in the list determines the order of rotation in the POS software banner area.

5.The picture browser list.

6.Set as main banner. The button to set selected picture (from the picture browser list (5) as main banner picture.

7.The traffic lights to indicate if the image resolution and aspect ratio are matching the picture size to fit into the banner area. The green light indicates the perfect match, and the red light indicates total mismatch. When the yellow light is visible, the match is not perfect but the image is usable.

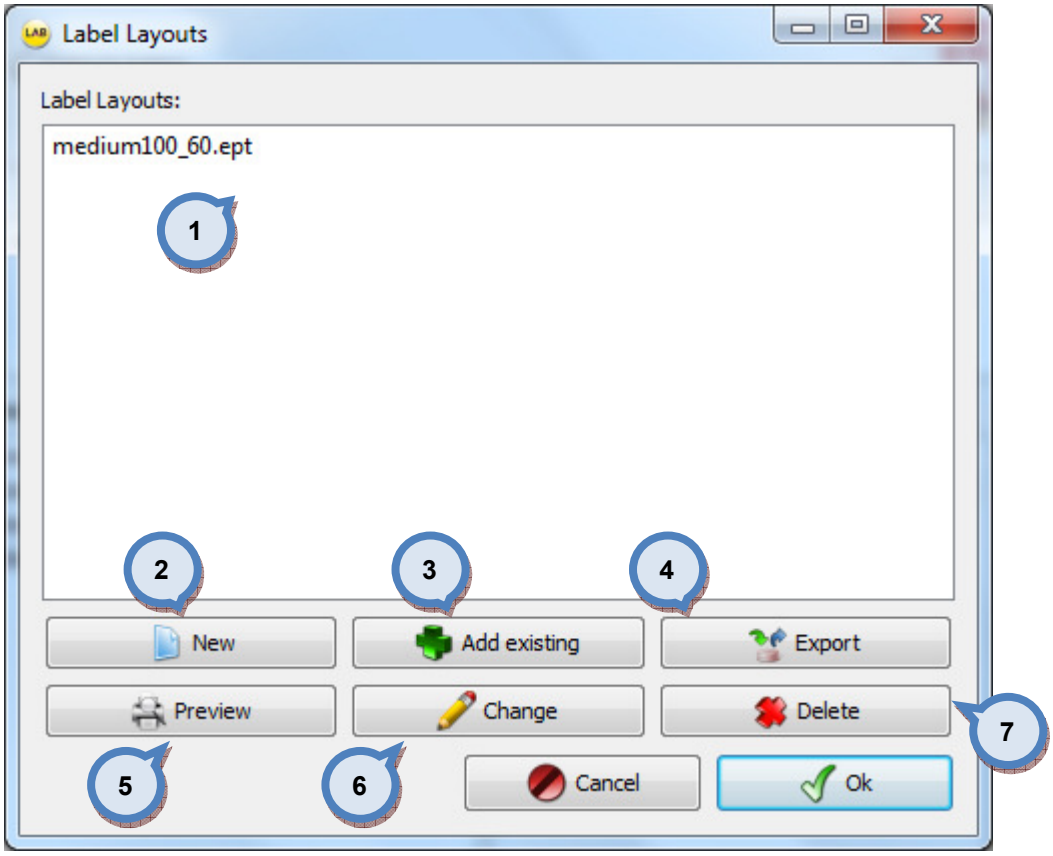
8.The preview area for the banner image as displayed in the POS software.

9.Display time: Time in seconds how long selected banner/ad will be shown.

Note: All pictures in the Picture browser are shown in the Innovatint Professional and Ultimate version with rotating or looping manner. In the Innovatint Basic version, on the main banner is displayed.

The label templates for the POS software can be set with the Choose labels button (**1**).

When the **Choose labels** button is clicked, the following options are available in the labels window:



1.Label layouts: List of label templates available for POS users.

2.New: Opens EasyLabel software to create new label template.

3.Add existing: Opens a window where to choose from available templates

4.Export: Saves selected template to hard drive

5.Preview: Displays selected template in a preview window.

6.Change: Opens selected template in a EasyPrint software on edit stage.

7.Delete: Deletes selected template from the database.

Note: Only EasyLabel label templates may be distributed via database, alternative solution Anylabel is not supported.

Note: EasyLabel manual is in appendix1

4.1.1 Products in zone

To make products in zones configuration, navigate into the **Management & Analysis ⇨ Zones ⇨Products in zone** page.

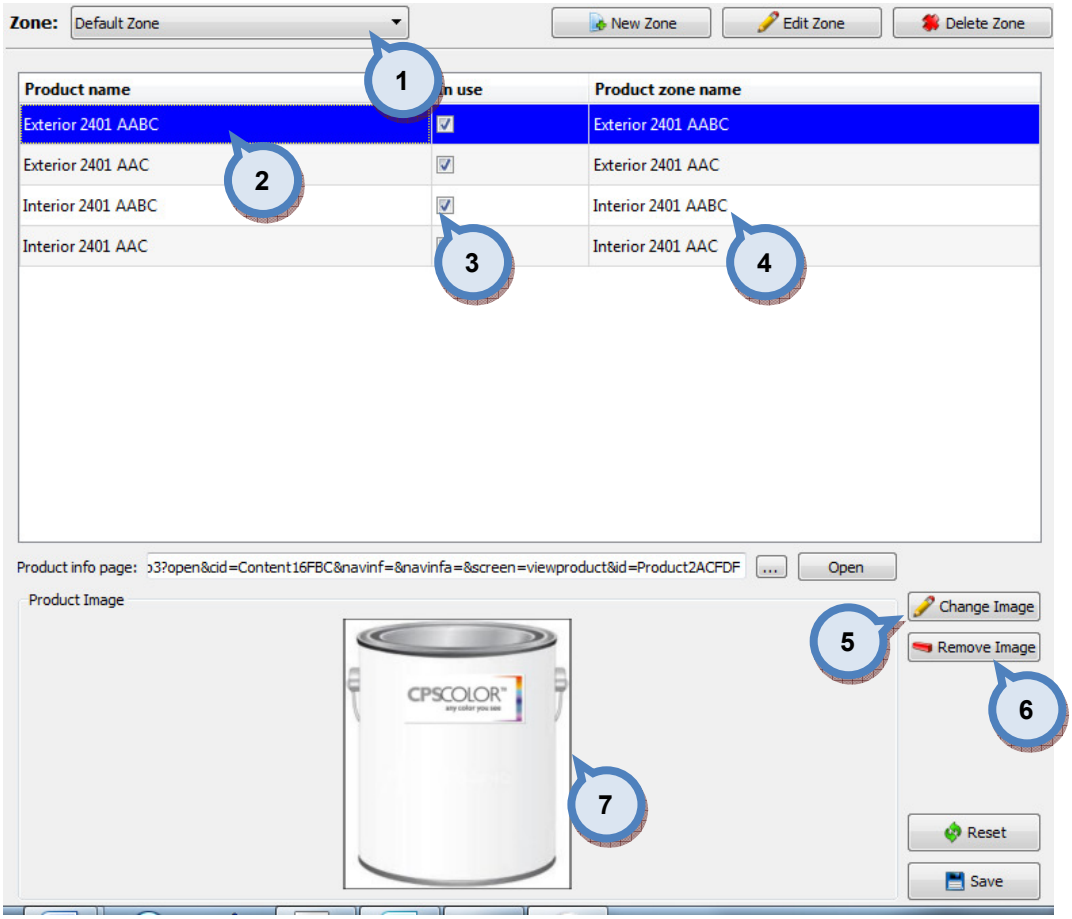
In products in zones page you can:

- Set products to be used in zones
- Edit product names used in zones
- Edit and remove product pictures in zones

In products in zones page you can also create and edit zones.

In this page, you can define which **products** are included in zone. You can also set a product picture, for each product to be displayed at POS when using this product in dispensing. You can also rename products used in zone.

In **Products in zone** page, you have following options available:



1.Zone: The drop down list to select the zone.

2.Product name: The list of all products in the system.

3.In use: When the check box is enabled, the product is used in the selected zone.

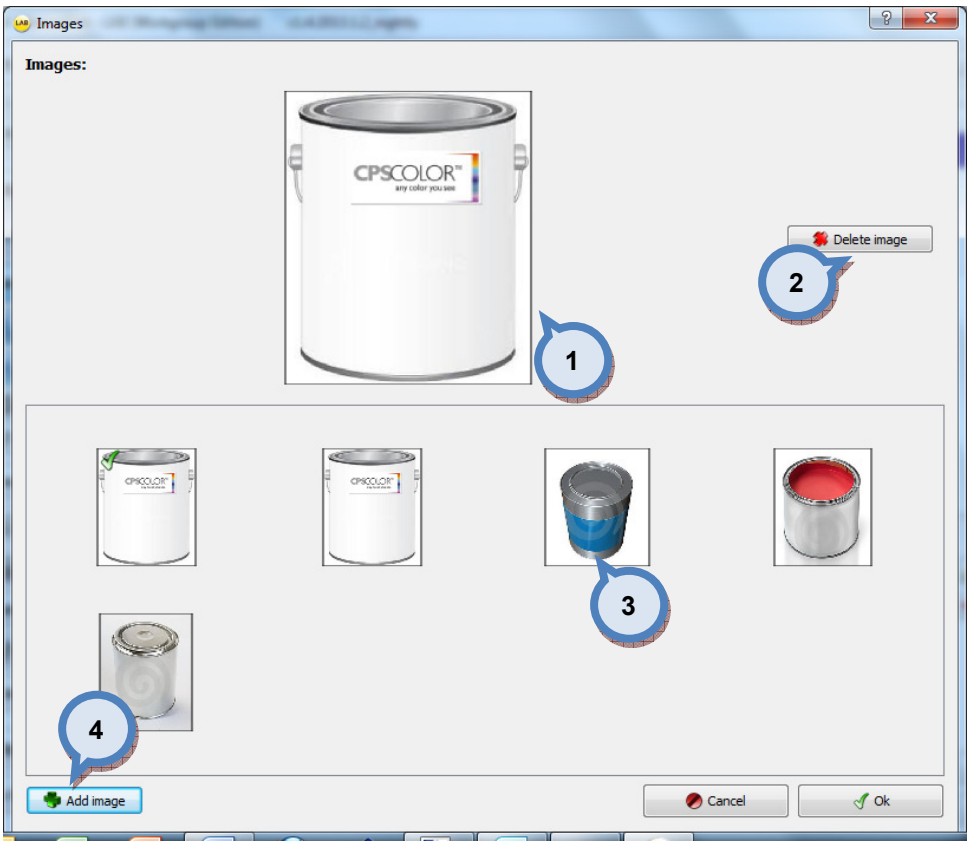
4.Product zone name: The name of the product used in selected zone. The product can have different names (displayed on the screen) on different zones.

5.Change Image: The button to set new picture displayed along the product (on the selected zone) on the screen.

6.Remove Image: The button to remove a picture displayed along with the product (on the selected zone) on the screen.

7.Product Image: The window to display product picture of selected product (if already set).

When **Change Image** button is clicked, the following options are available:



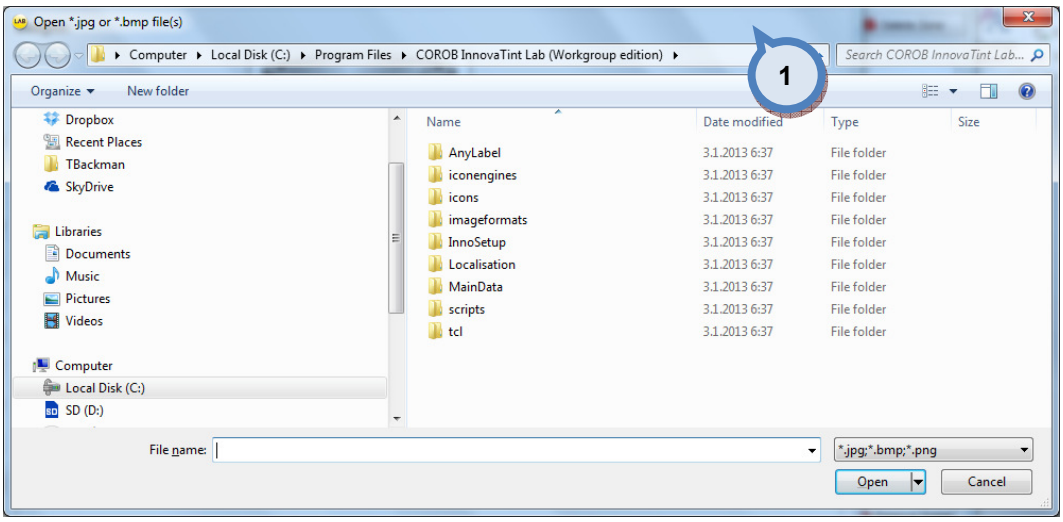
1.Image: The image which is already set for selected product (if done already).

2.Delete image: The button to remove a picture displayed along with the product.

3.Image list: The list (pictures) of the images already uploaded into the program.

4.Add image: The button to add new image to image list (3).

When **Add Image** button is clicked, the following options are available:



1.Open: The selector window to search and select the image file to be uploaded.

4.1.2 Products in group

To make products in group configuration, navigate into the **Management & Analysis ⇨ Zones ⇨Products in groups** page.

In products in groups page you can:

- Create and edit group names
- Add and remove products in groups
- Define the order of the products in the tree manu

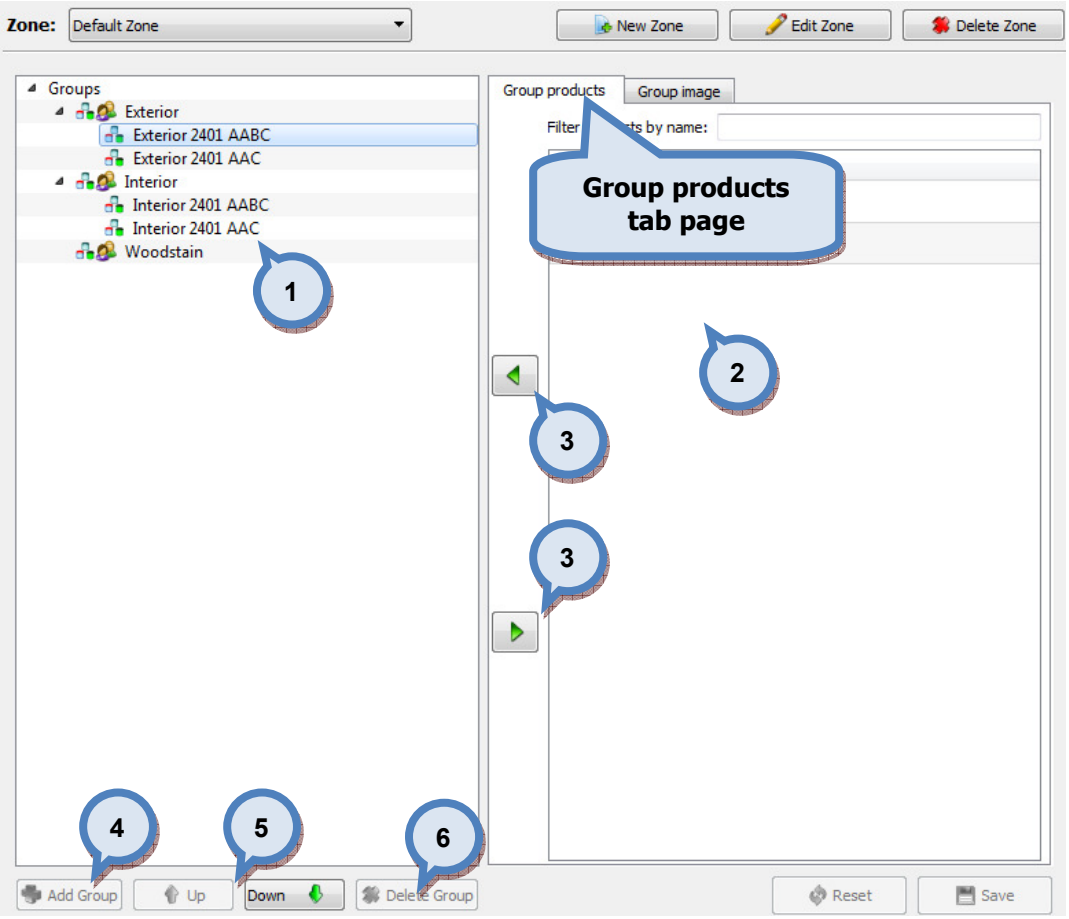
In products in groups page has two tab pages:

- Group products
- Group image

In products in groups page you can also create and edit zones.

Product groups can be used to group similar kind of products to be used as set. Product groups can be set e.g. by product properties, like: interior quality / exterior quality.

In the **Products in group** page, you have the following options are available:



1.Group list: The list of already set groups and products within. Use + and – buttons (in front of group name) to display/hide products in the group.

2.Group products: The list of non-selected products (when group is selected from the list (1).

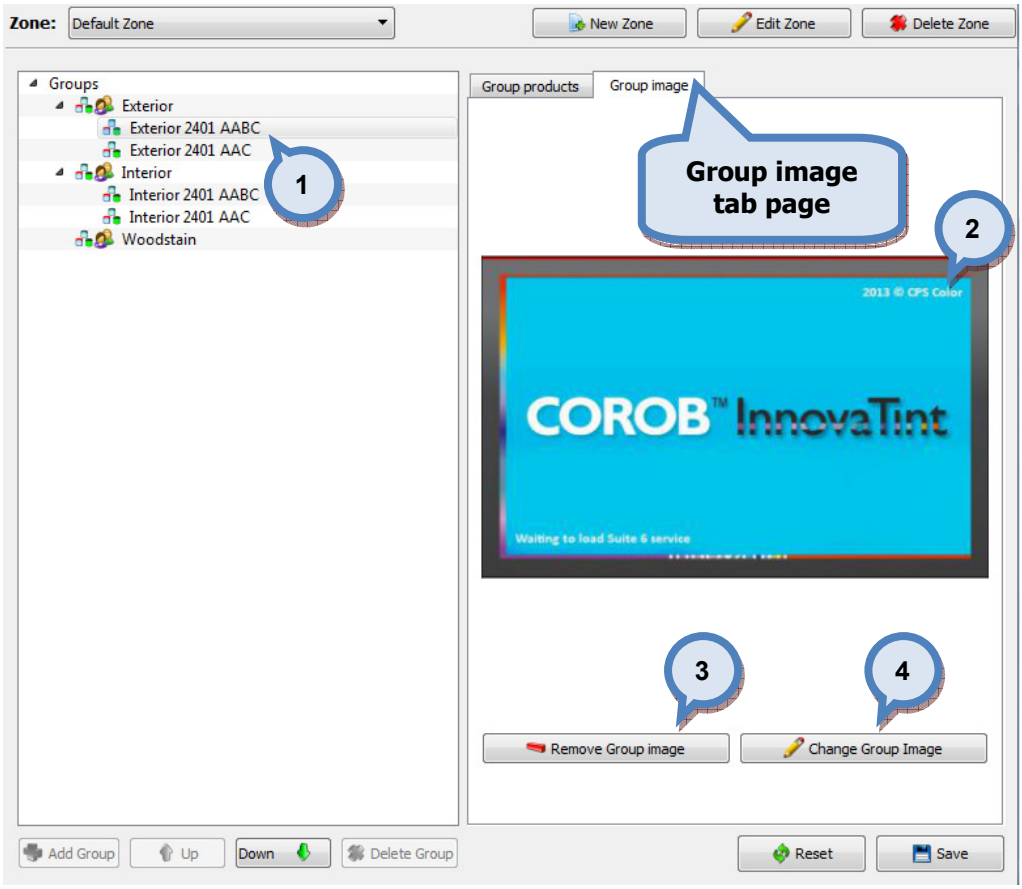
3.Arrow buttons: The buttons to add and remove products in group.

4.Add group: The button to create new group.

5.Up / Down: The buttons to sort products within the group list.

6.Delete Group: The button to delete selected group.

In the **Products in group** page, you have the following options are available:



1.Group list: The list of already set groups and products within. Use + and – buttons (in front of group name) to display/hide products in the group.

2.Image: The image which is already set for selected group (if done already).

3.Remove Group Image: The buttons to remove image from the selected group.

4.Change Group Image: The buttons to change image for the selected group.

Note: This feature is not active on POS software.

4.1.3 Color cards in zone

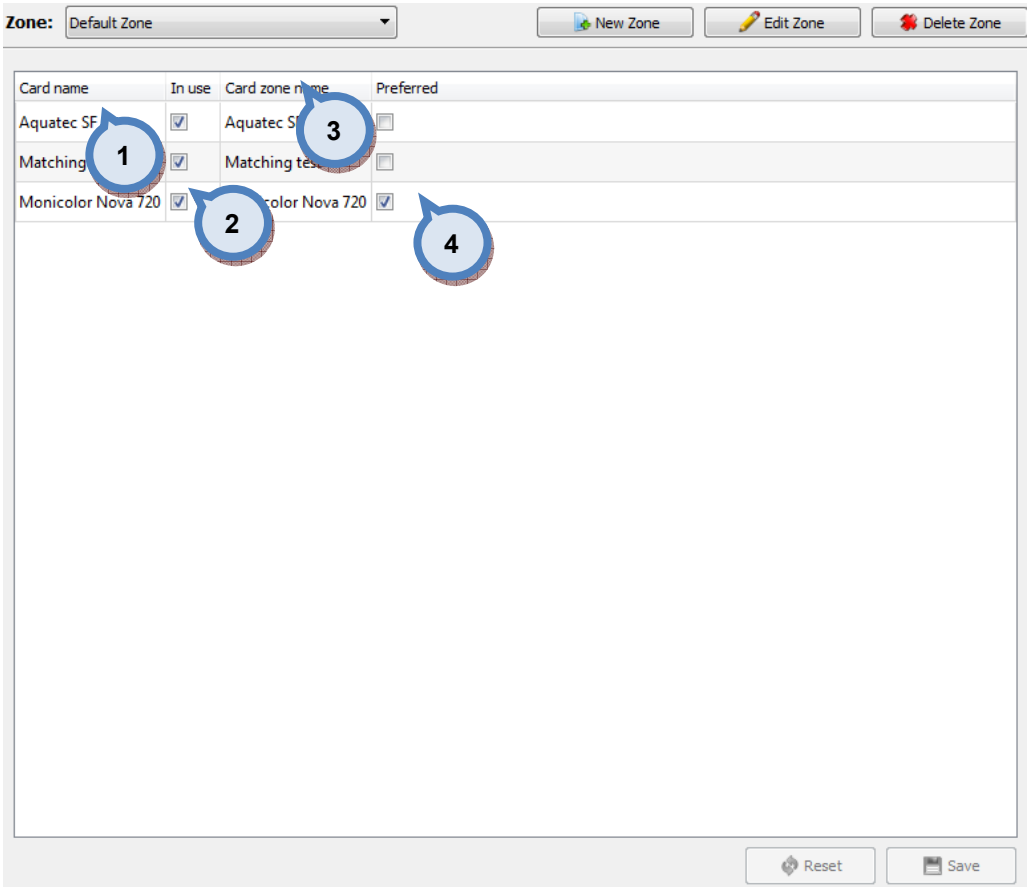
To make color card configuration in zones, navigate into the **Management & Analysis ⇨ Zones ⇨ Color cards in zones** page.

In color cards in zone page you can:

- Set color cards to be used in zones
- Edit color card zone names to be used in zones
- Set color card to be used as preferred color card

In color cards in zone page you can also create and edit zones.

In the **Color cards in the zone** tab page you have the following options:



1.Card name: The list of the color cards in the system.

2.In use: When the check box is enabled, the color card is used in the selected zone.

3.Card zone name: The name of the color card used in the zone.

4.Preferred: When the check box is enabled, the color card is preferred in the selected zone. When the harmonious colors are searched in the POS software, the preferred color cards are used in the search.

4.2 Formula management

To manage formulas, navigate into the **Management & Analysis ⇨ Formula management** page.

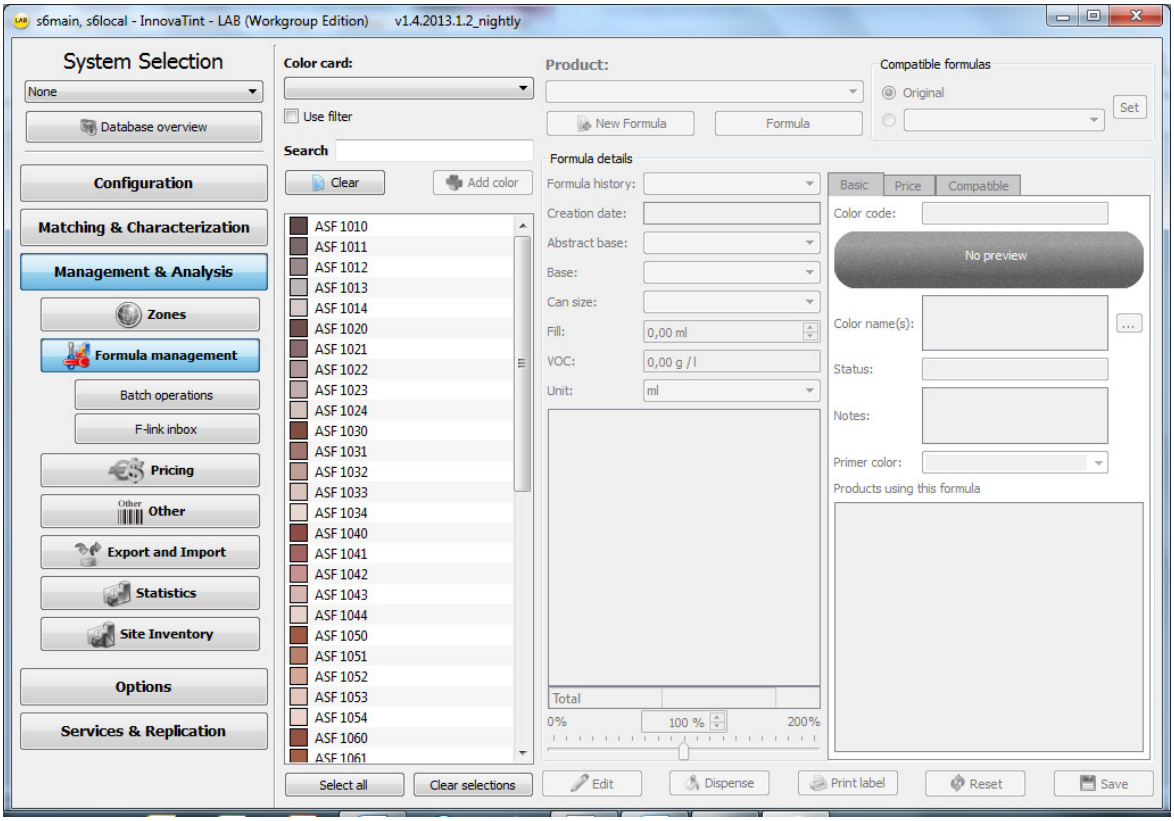
In formula management page you can:

- Search formulas from database
- Create and edit formula
- View formula history
- Set compatible formula when different products are sharing formulas
- View formula prices

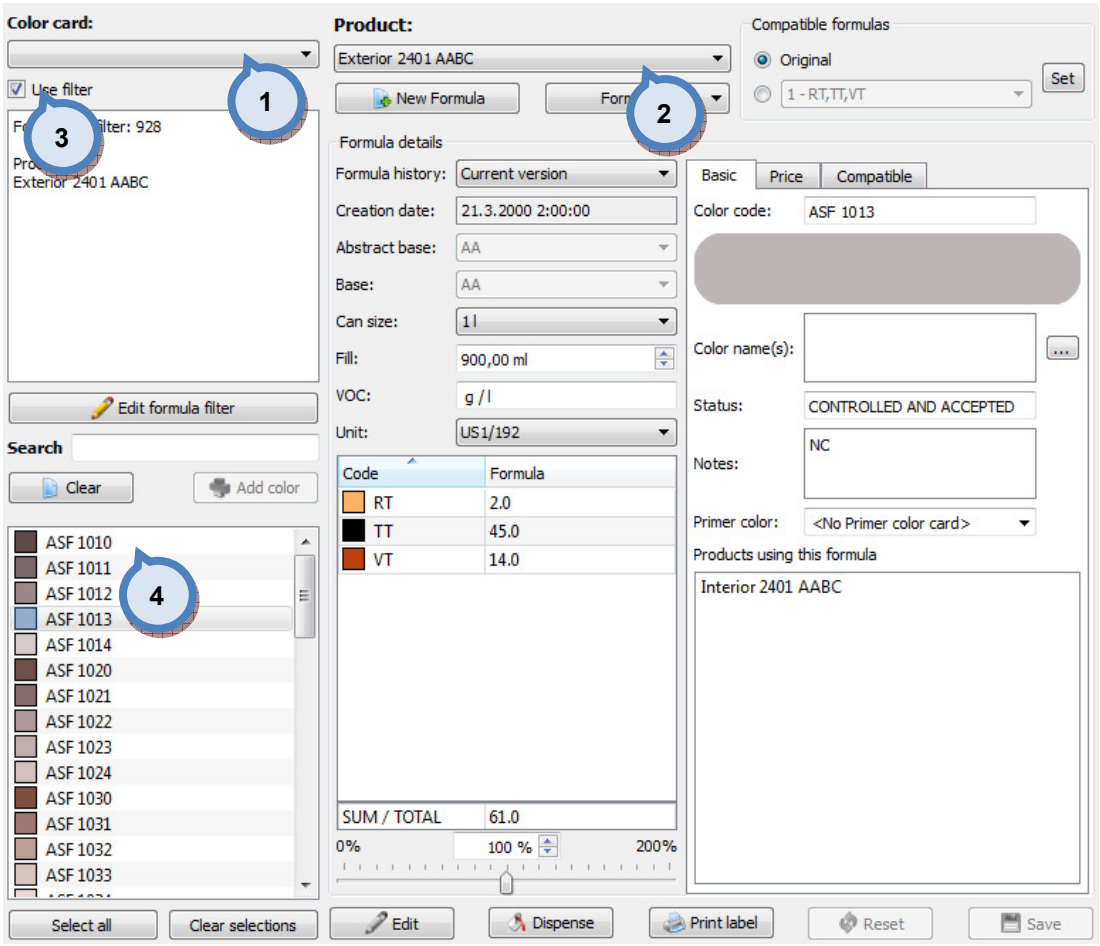
In this page, you can view, edit, and delete existing color formula, and also manually create new formula. In this page, you can also create multiple color formula for single color, and define which products are using which alternative formula. This page allows you to also rename colors used in different zones, and view formula pricing based on possible zone pricing.

The formula management section has two sub pages:

- Batch operations
- F-link inbox



In the **Formula management** page, you have the following options available:



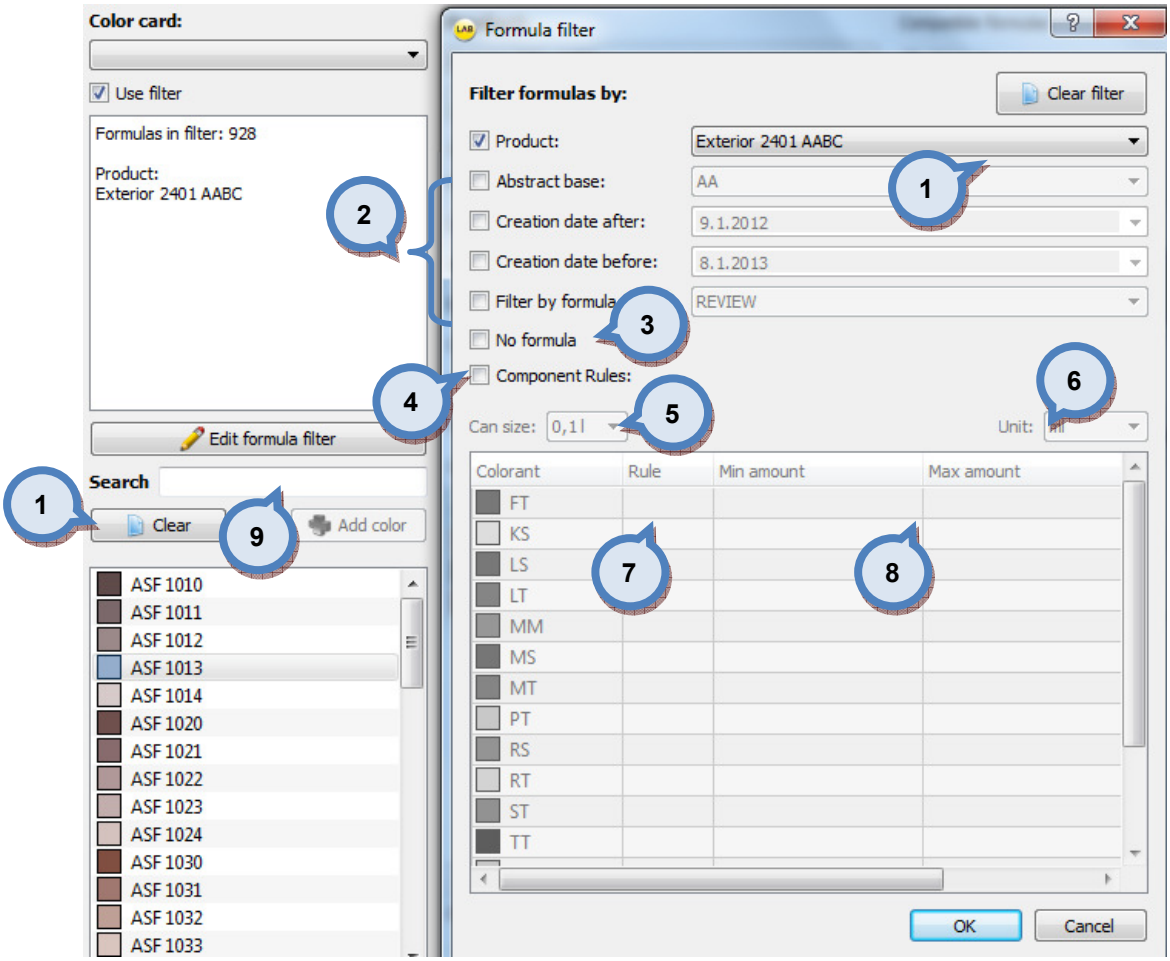
1.Color card: The drop down list to select a color card.

2.Product: The drop down list to select a product.

3.Use filter / Search: The check box and search field to narrow down the list of colors in the colors list (4).

4.Colors: The list of the colors based on the selections on points 1, 2, and 3.

When **Use filter** check box is enabled, the following options are available:



1.Clear filter: The button to reset the selections

2.Filter options:

Product: The drop down list to select a product.

Abstract base: The drop down list to select an abstract base.

Creation date after: The drop down list to select a date. All formulas created after selected date are included in the search.

Creation date before: The drop down list to select a date. All formulas created before selected date are included in the search.

3.No formula: When the check box is enabled all colors with no formula created are included in the search.

4.Component rules: When the check box is enabled, section below with component rules are enabled.

5.Can size: The drop down list to select a can size to be used in the component rules below.

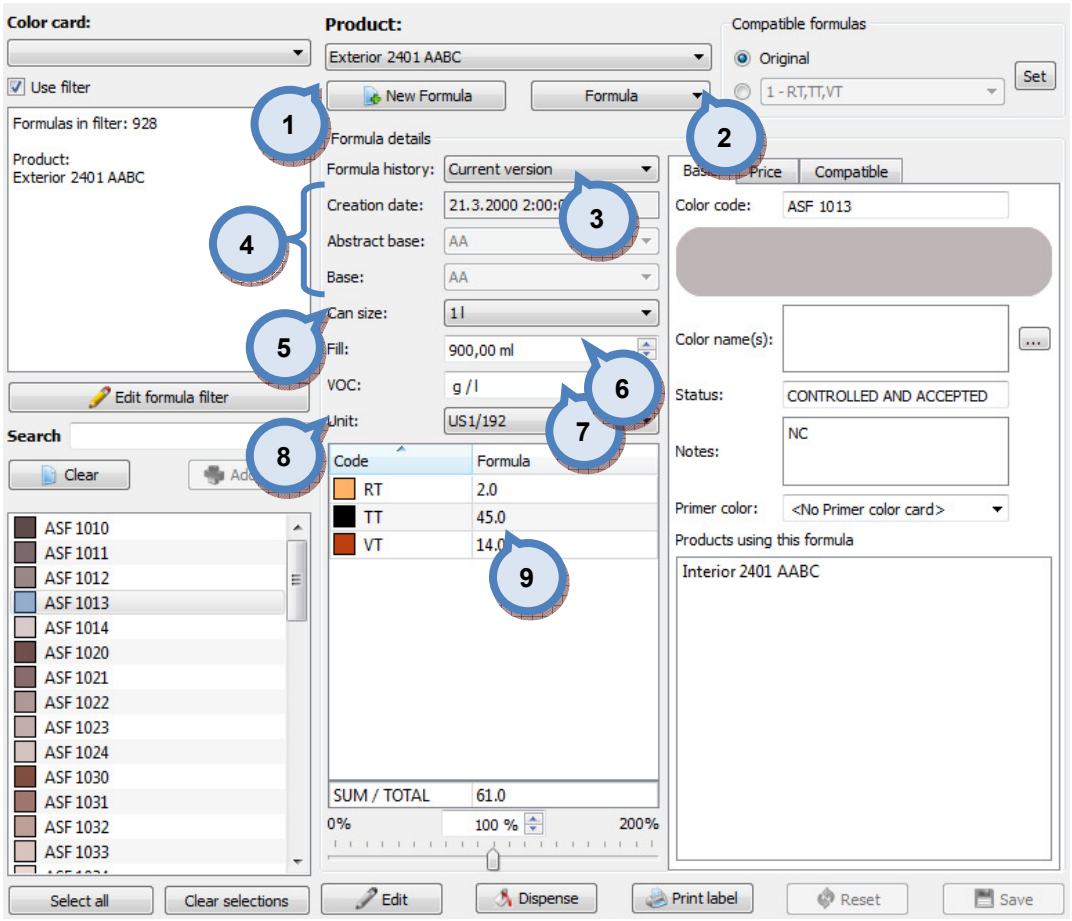
6.Unit: The drop down list to select a unit to be used in the component rules below.

7.Rule: When the green button is visible, this rule is enabled. When the red button is visible, this rule is not used.

8.Min amount/max amount: The drop down selectors to set minimum and maximum amount of the colorant used as rule in the search.

9.Search: The text field to be used to narrow down the search result. Type in the name or code of the color or part of it to make a search.

When a color is selected on the left hand side table, in the upper part of the **Formula details** section of the **Formula management** page, you have the following options available:



1.New formula: The button to create a new color formula. When the New formula button is clicked the all changeable fields are changed to edit mode. See further details on the following pages.

2.Formula: The button to delete the selected formula. See next page for further information.

3.Formula history: The drop down list to select a formula version.

4.The text field to view:

Creation date of the formula (version).

Abstract base of the formula.

Base paint of the formula.

5.Can size: The drop down list to select a can size for the formula view.

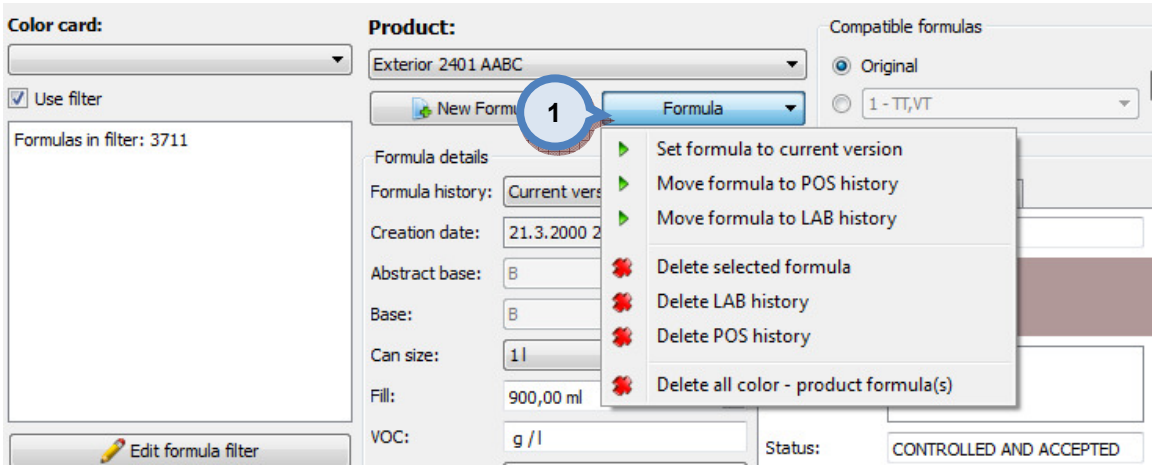
6.Fill: If custom can size is selected **Fill(ml)** field is used to determine the can size.

7.VOC: The text field to display the unit for the Volatile Organic Compounds, or solvents.

8.Unit: The drop down list to select formula unit.

9.The table to display the color formula.

When a color is selected on the left hand side table, in the upper part of the **Formula details** section of the **Formula management** page, and the **Formula** button is clicked, you have the following options available:



1. Formula options**:**

Set formula to current version: The selected formula is set as current version status. (one to be used)

Move formula to POS history: The selected formula moved to Innovatint POS history.

Move formula to LAB history: The selected formula moved to Innovatint LAB history.

Delete selected formula: The selected formula is deleted.

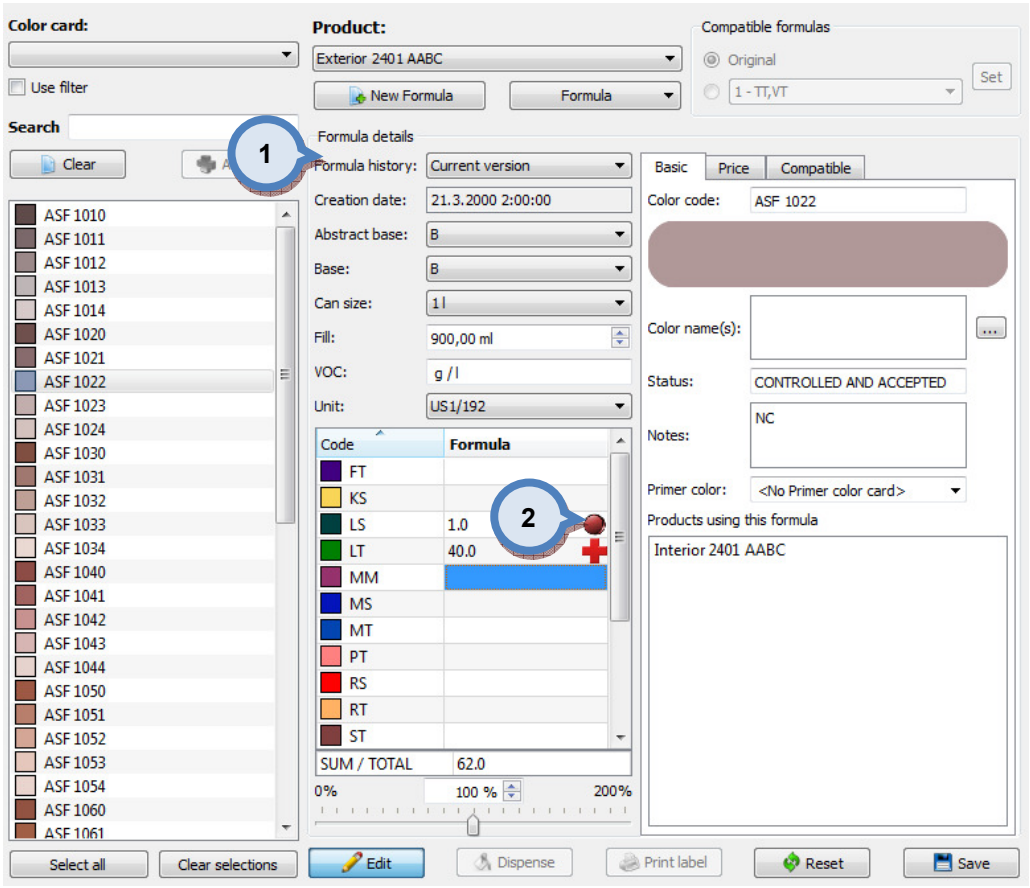
Delete LAB history: The selected formula is deleted from the Innovatint LAB history.

Delete POS history: The selected formula is deleted from the Innovatint POS history.

Delete all color – product formula(s): All formulas related this color are deleted. Also formulas that are linked with other products with this same color code are deleted.

Note: if no formula is assigned to 'current version', POS is not able to any show formula.

When a color is selected on the left hand side table, and the **New formula** button is clicked the formula table is emptied and enabled for edit, and you have the following options available:



1.Formula details area: The table to input the colorant amounts. Select first the unit and the can size.

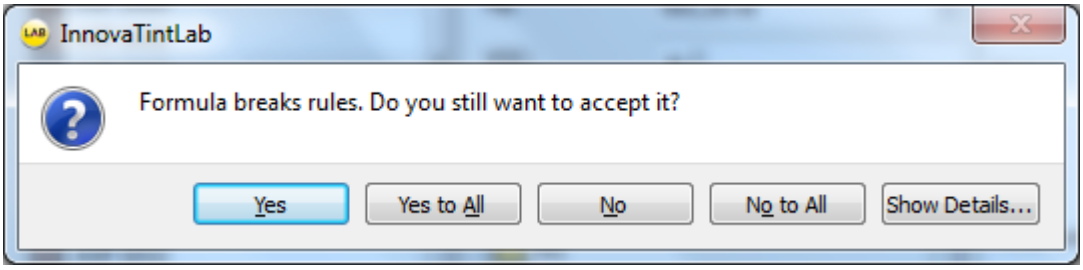
2.Rules indicators: Manual formula input follows the rules set in color matching area. These are to assist users to create valid formulas.

The red button is displayed when non-acceptable colorant pair is used (as set in the System specific rules, see further instructions in the section 3.2.1).

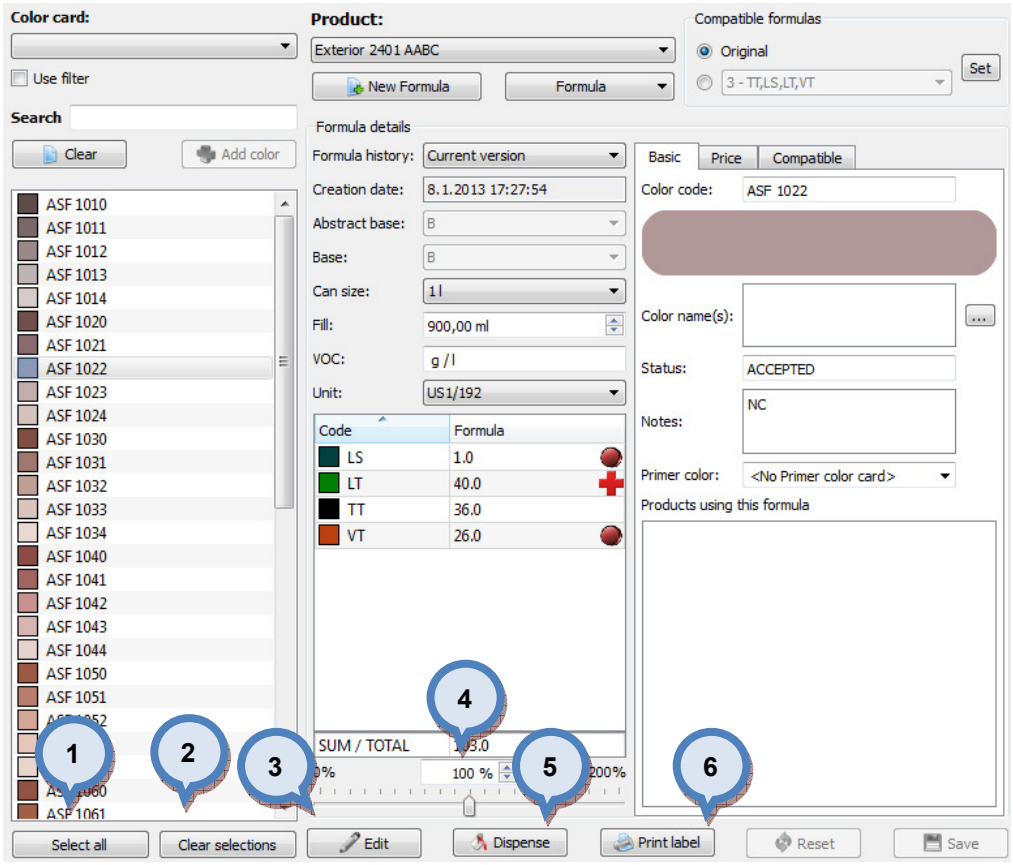
The red plus symbol is displayed when the colorant amount is more than the upper limit set for the colorant (as set in the Product specific rules, see further instructions in the section 3.2.2).

The red minus symbol is displayed when the colorant amount is less than the lower limit set for the colorant (as set in the Product specific rules, see further instructions in the section 3.2.2).

When saving a new formula, if it violates rules, following window will be displayed.



When a color is selected on the left hand side table, in the lower part of the **Formula details** section of the **Formula management** page, you have the following options available:



1.Select all: The button to select all colors in the colors list.

2.Clear selections: The button to clear all selections in the colors list.

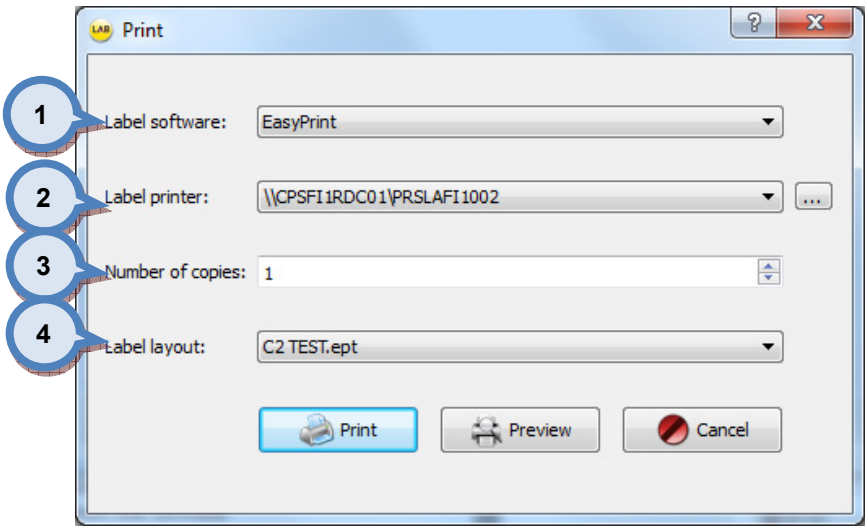
3.Edit: The button to edit a selected formula (will create new version of the formula, current formula is used for edit).

4.Scaling: The text box to scale up or down the formula by typing the percentage number in to the field. Alternatively, you can use pointer on below of the text box to scale up or scale down the formula.

5.Dispense: The button to send selected formula to the dispenser.

6.Print label: The button to print a label for selected formula.

When the **Print label** button is clicked, following options are available:



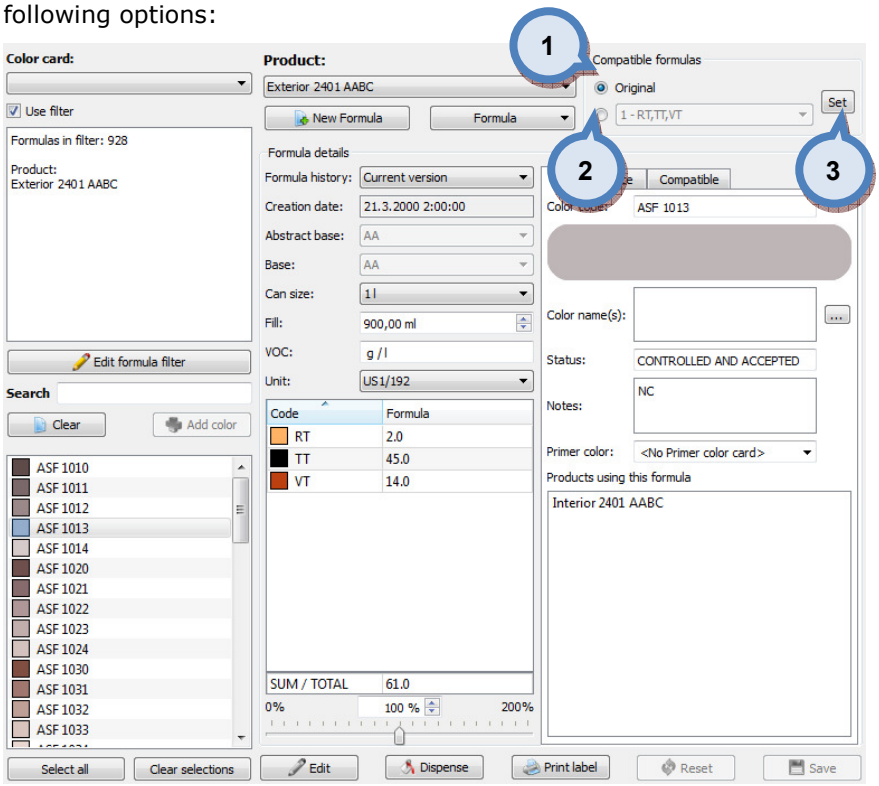
1.Label software: Dropdown list to select used label software, EasyPrint by default – see Appendix 1.

2.Label printer: Dropdown list to select label printer. Please refer to Windows manual on further instructions to install a printer in to the system.

3.Number of copies: Number of labels to be printed.

4.Label layout: Dropdown list to select label layout.

In the **Compatible formulas** section of the **Formula management** screen, you have the following options:

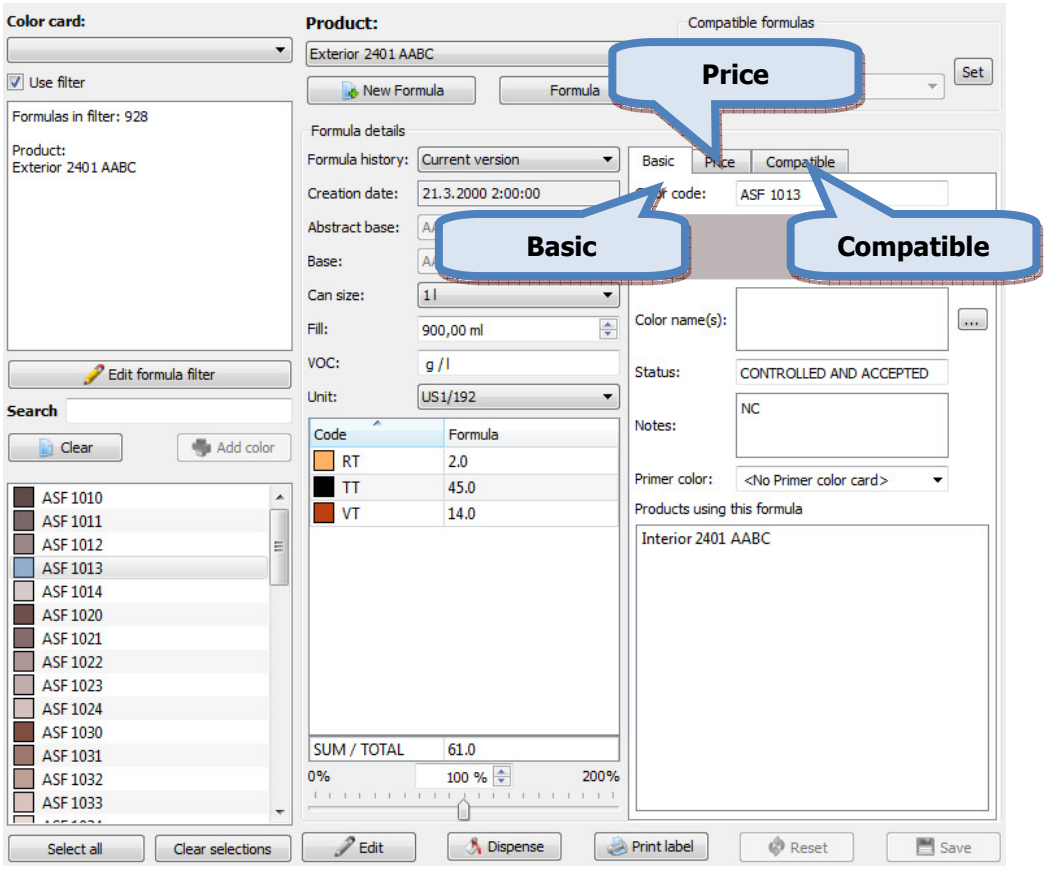


1.Original: When the radio button is selected the original formula is used.

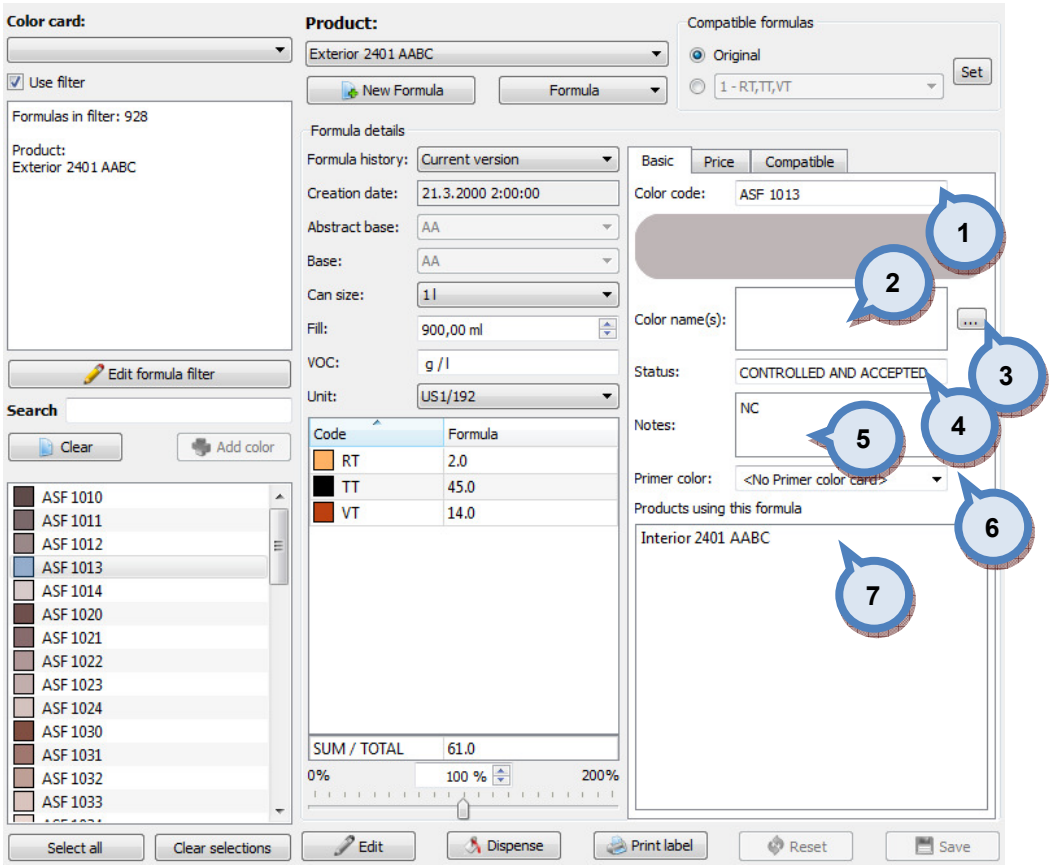
2.When the radio button is enabled, the drop down list is activated, and alternative formula can be selected from the list.

3.Set: The button to set alternative formula (selected from drop down list (2)) into the use.

In the right hand side of the **Formula management** screen, you have 3 tab pages: Basic, Price and Compatible.



In the **Basic** tab page of the **Formula management** screen, you have the following options:



1.Color code: The text field to display the color code.

2.Color name(s): The text field to display the name of the color, or the names of the color if multiple names exists.

3. : The button to add or modify the color names.

4.Status: The drop down field to display (or edit) the formula status. Options are:

Review: Default status for new formula

Accepted: The status for the formula which has not been dispensed, and has been accepted without review with real drawdown. The formulas that are imported from the external file or the database without any status, will have this status.

Dispense: The status for the formula which is placed in to the dispensing queue.

Control: The status for the formula which is dispensed and is waiting to be accepted or rejected.

Controlled and accepted: The status for the formula which is dispensed and after review it has been accepted.

Rejected: The status for the formula which has not been dispensed, and has been rejected without review with real drawdown.

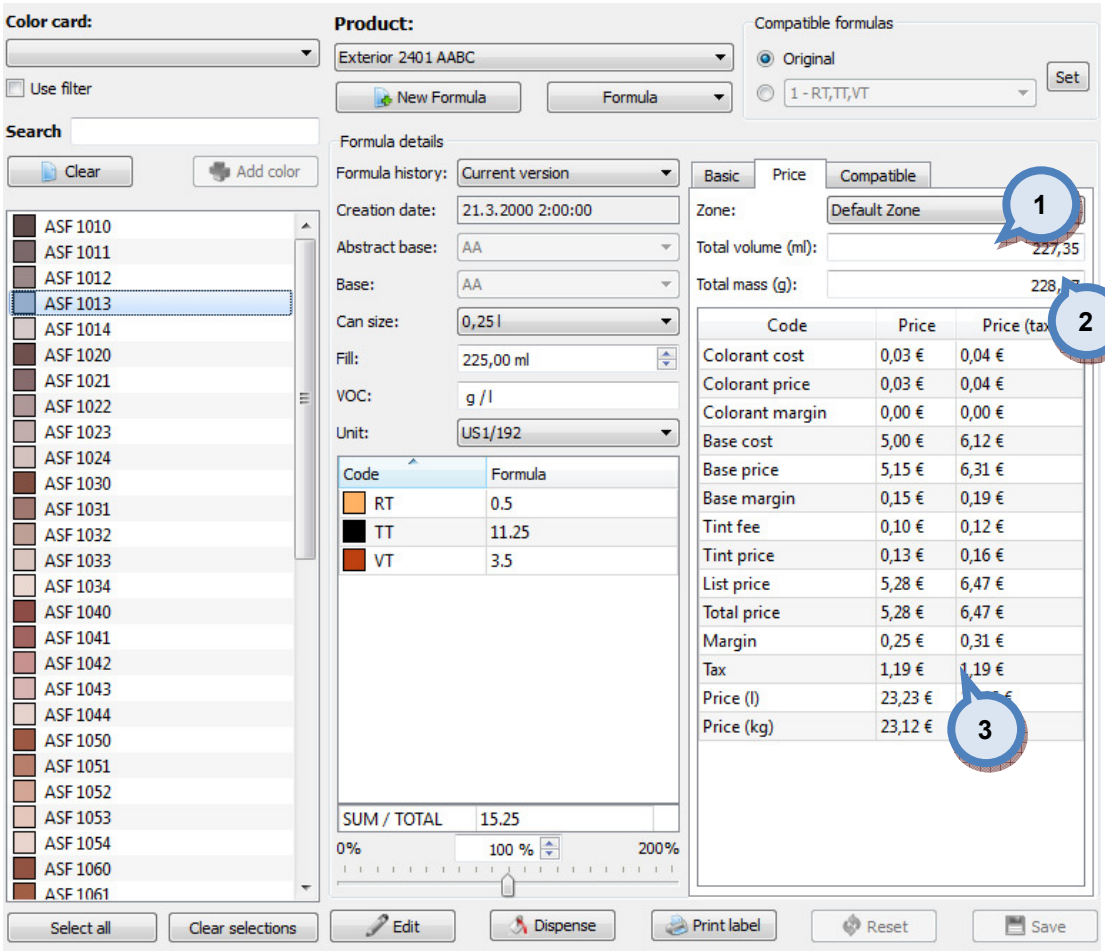
Controlled and rejected: The status for the formula which is dispensed and after review it has been rejected.

5.Notes: The text field to display and edit formula notes. Place cursor or mouse pointer into the text field to type in the text.

6.Primer color: The drop down list to select a color of the primer. Primer color card has to be set beforehand for the product to make this field enabled.

7.Products using this formula: The table to display all products that are using selected formula.

In the **Price** tab page of the **Formula management** screen, you have the following options:



1.Total volume (ml): The text field to display the total volume of the formula (based on the selected can size). The unit of the measure is millilitres.

2.Total mass (g): The text field to display the total weight of the formula (based on the selected can size). The unit of the measure is grams.

3.The table to display price, cost, margin, and tax information.

Colorant cost

Colorant price

Colorant margin

Base cost

Base price

Base margin

Tint fee

Tint price

List price

Total price

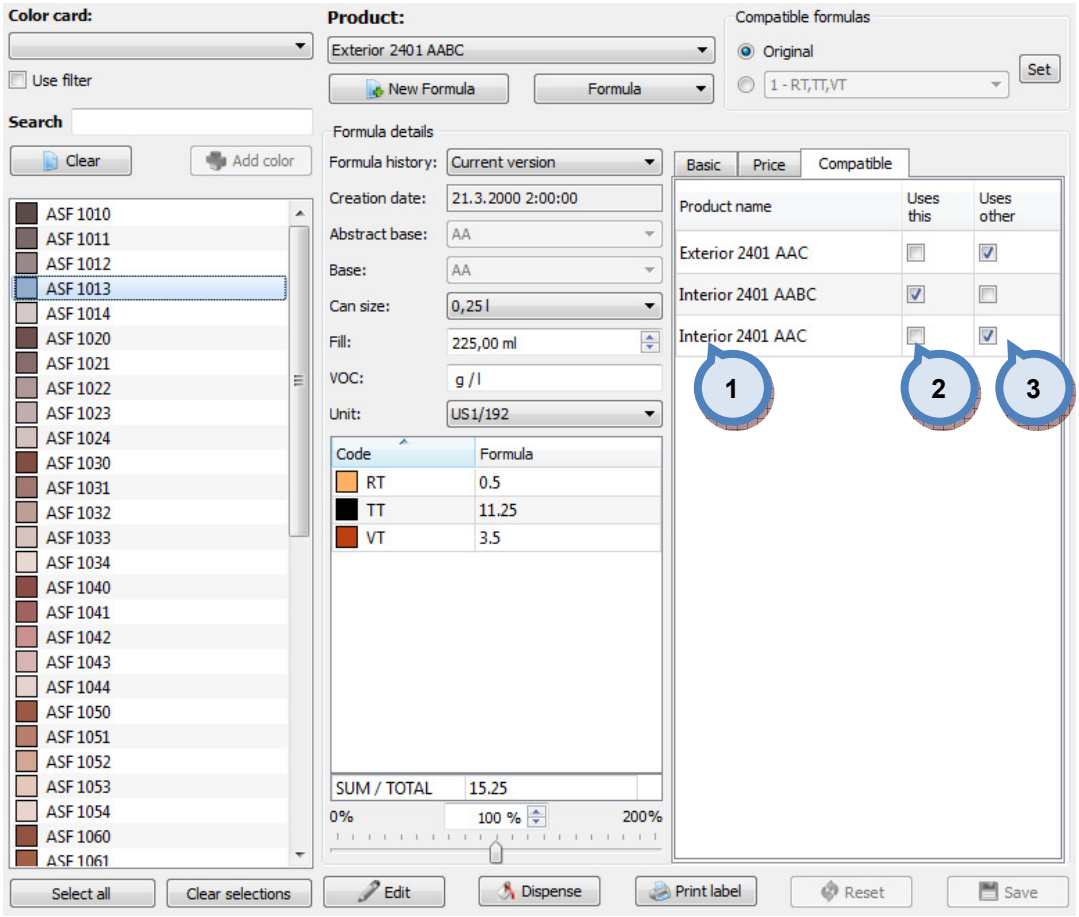
Margin

Tax

Price (l)

Price (kg)

In the **Compatible** tab page of the **Formula management** screen, you have the following options:



1.Product name: The list of the compatible products i.e. Shares the same Abstract base.

2.Uses this: When check box is enabled product is using selected formula.

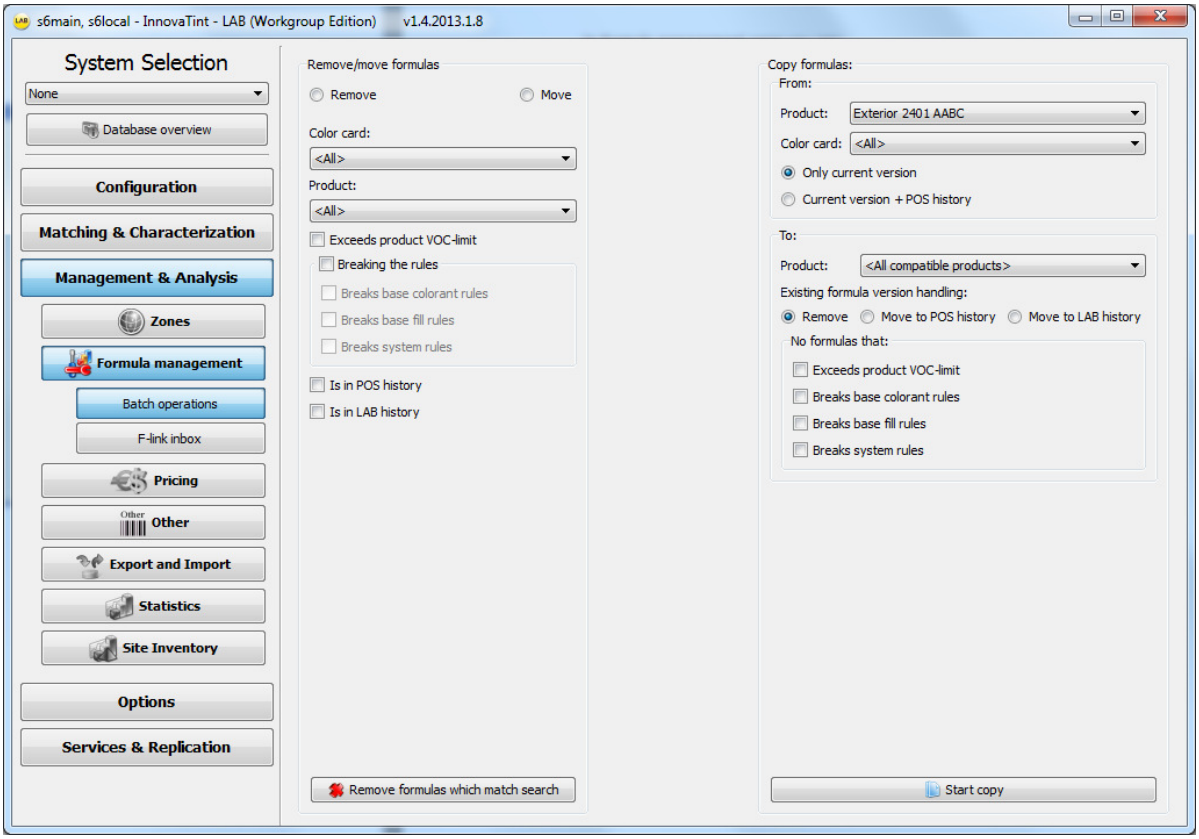
3.Uses other: When check box is enabled product is using other than selected formula.

4.2.1 Batch operations

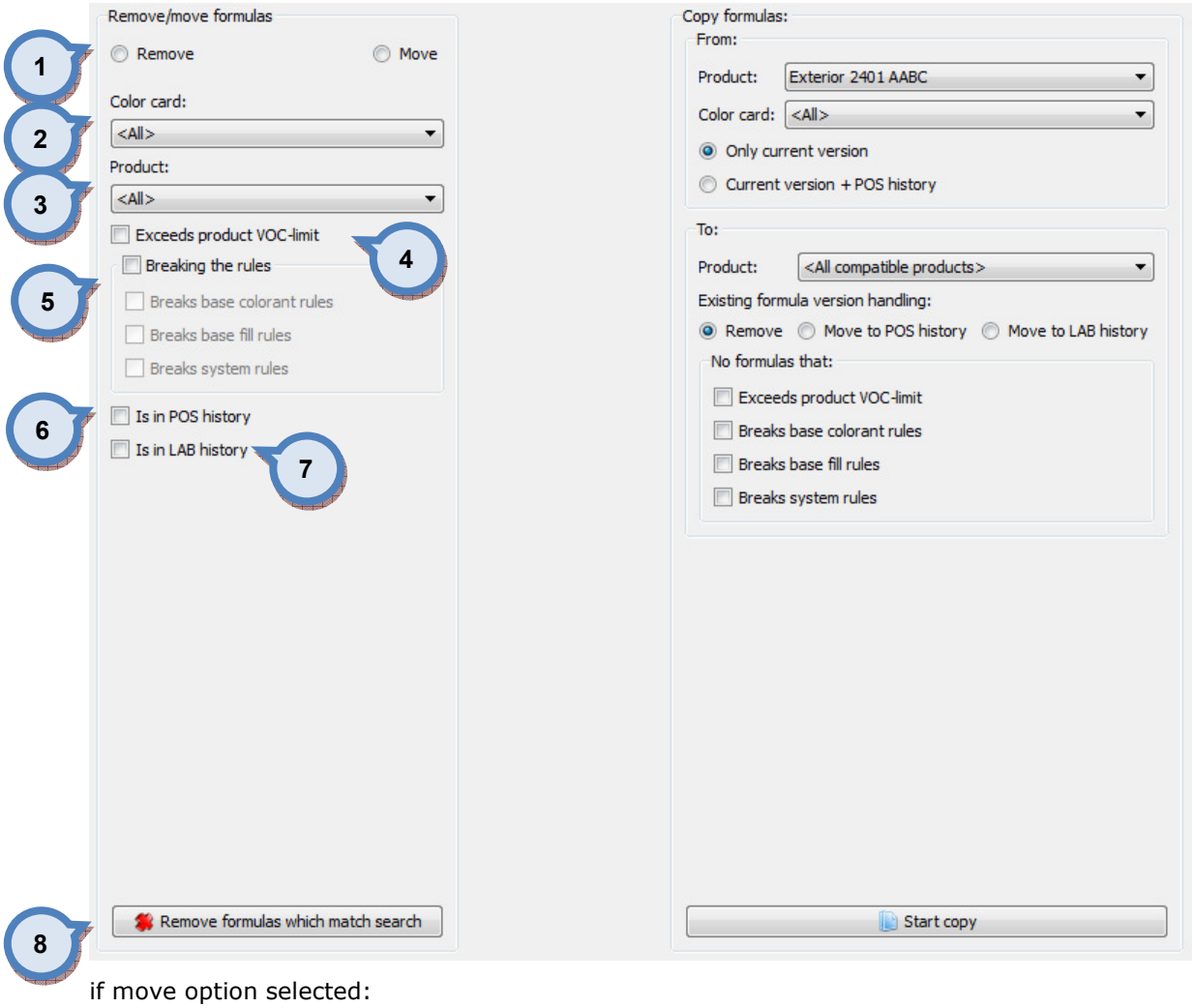
To manage batch operations, navigate into the **Management & Analysis ⇨ Formula management > Batch operations** page.

In Batch operation page you can:

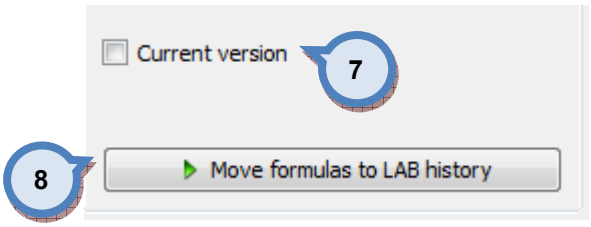
- Remove & move formulas from the products, and limit the effect with the selectors
- Copy "approved" formulas in batches to other products, and set the rules to these operations.



On the **Remove/move formulas** area, following items are available:



if move option selected:



1.Remove/move: Radio button to select type of operation, remove / move.

2.Color card: Dropdown list to select all color cards or a color card.

3.Product: Dropdown list to select all products or a product.

4.Exceeds product VOC-limit: limit the action to VOC checking.

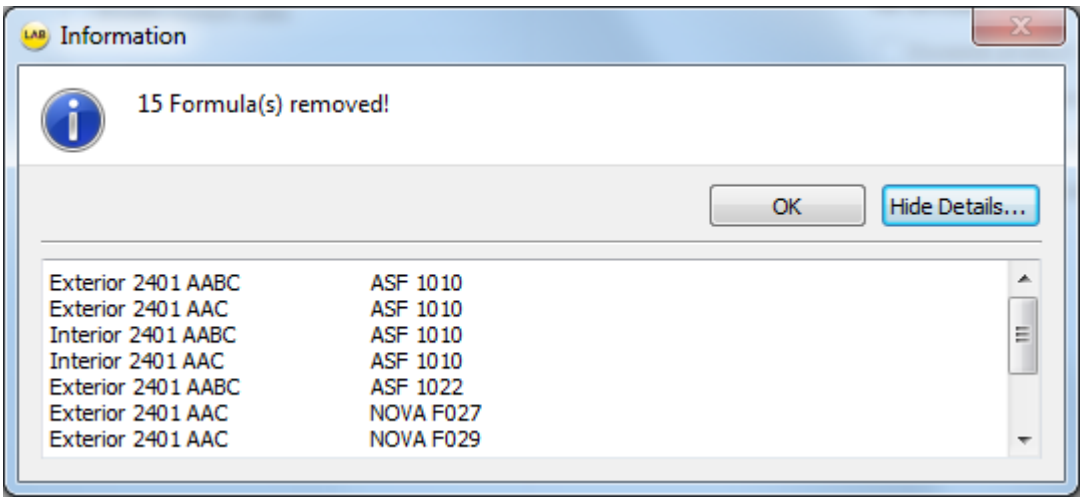
5.Breaking the rules: Three options to limit the action; breaks base colorant rules, Breaks base fill rules and Breaks system rules.

6.Is in POS history: Only POS history versions effected, that is, current version will remain

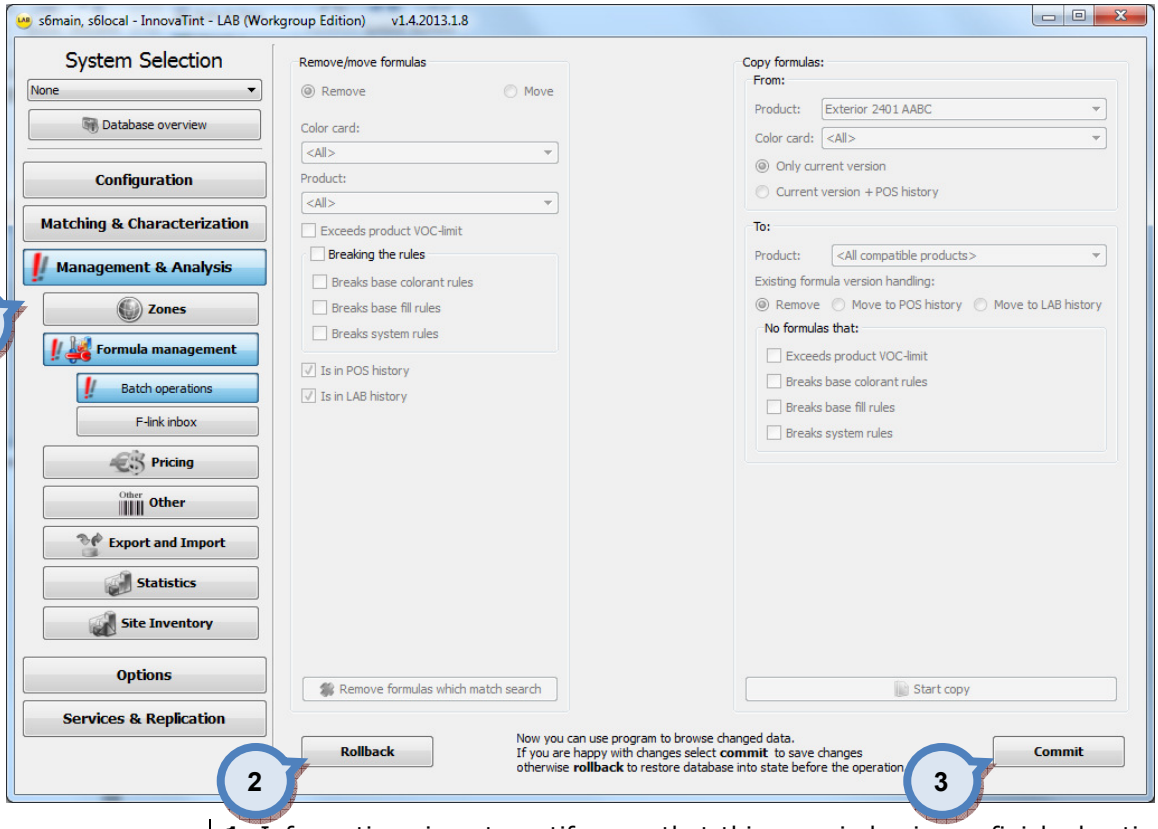
7.Is in LAB history/Current version: remove LAB history formulas/ move current version to LAB history.

8.Remove formulas which match search / Move formulas to LAB history: Button to start selected action.

When the (8) action button is clicked, following window will be shown:



It will inform effected product and their colors. After clicking "OK", following options are available:

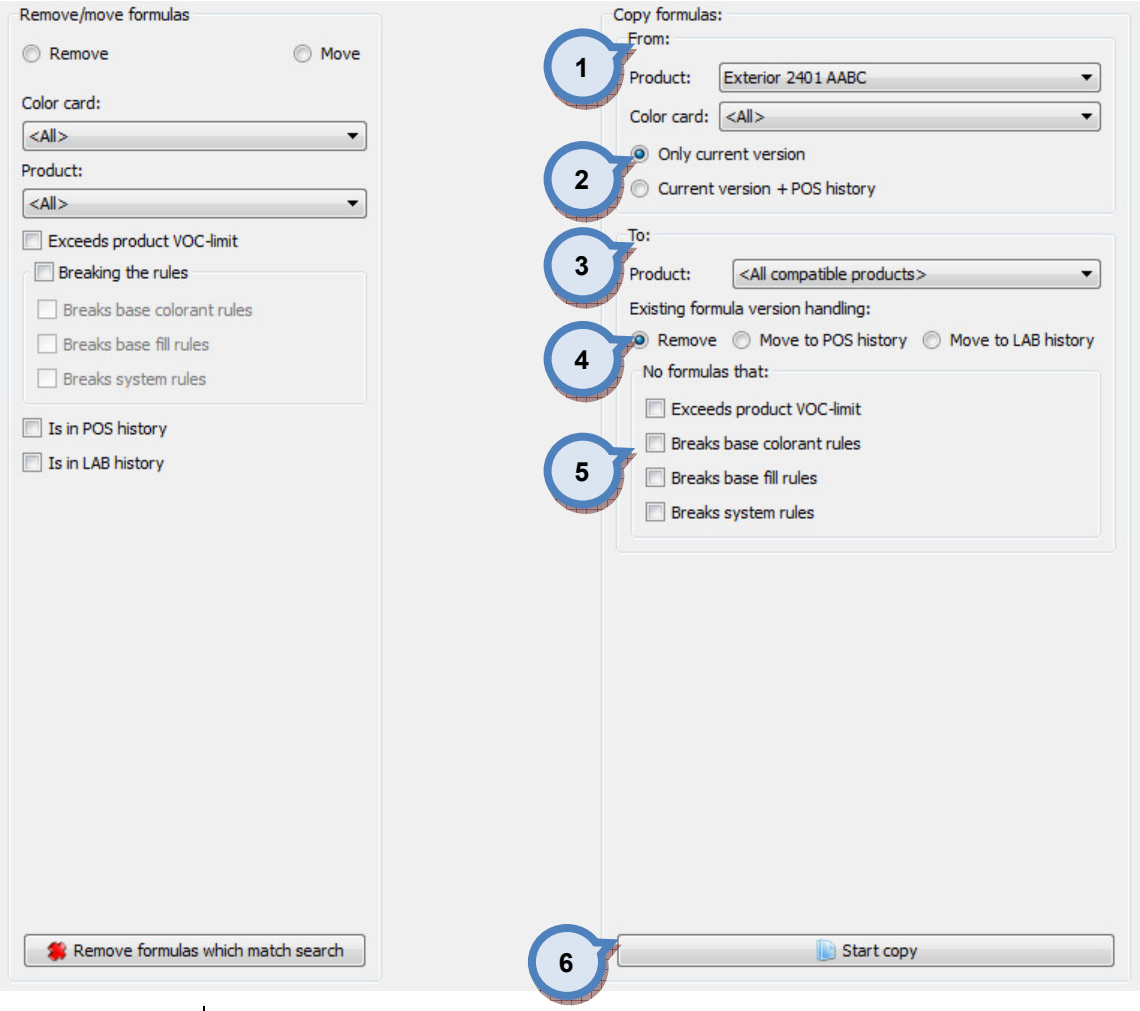


1. Information signs to notify user that this area is having unfinished actions, which requires decision. During this status, it is possible to move around different areas of software, but database changes are not allowed.

2.Rollback: Rollback button to cancel remove/move action.

3.Commit: Commit button to finalize remove/move action.

On the **Copy formulas** area, following items are available:



1.From: Area to select copied formulas. After product selection, either to select from the dropdown list all color cards or to limit selection to a color card.

2.Radio buttons to select the scale of copying, current version or also POS history.

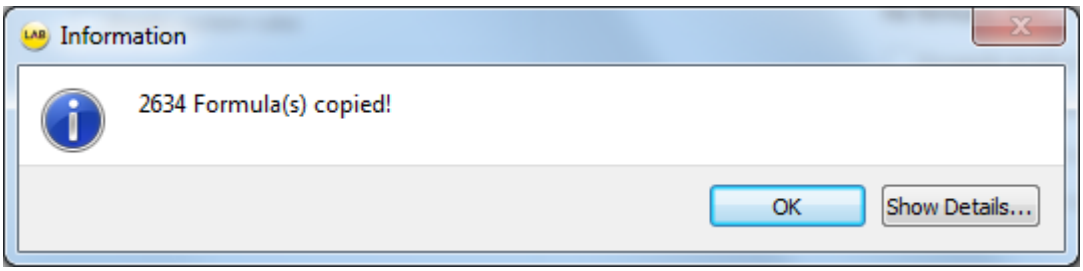
3.To: a dropdown list to select where to copy formulas. Options are all compatible products or single product. **note:** Abstract bases must match.

4.Existing formula version handling: a Radio button selection to make for the cases where the target product already has available formulas. Options are remove, Move to POS history, Move to LAB history.

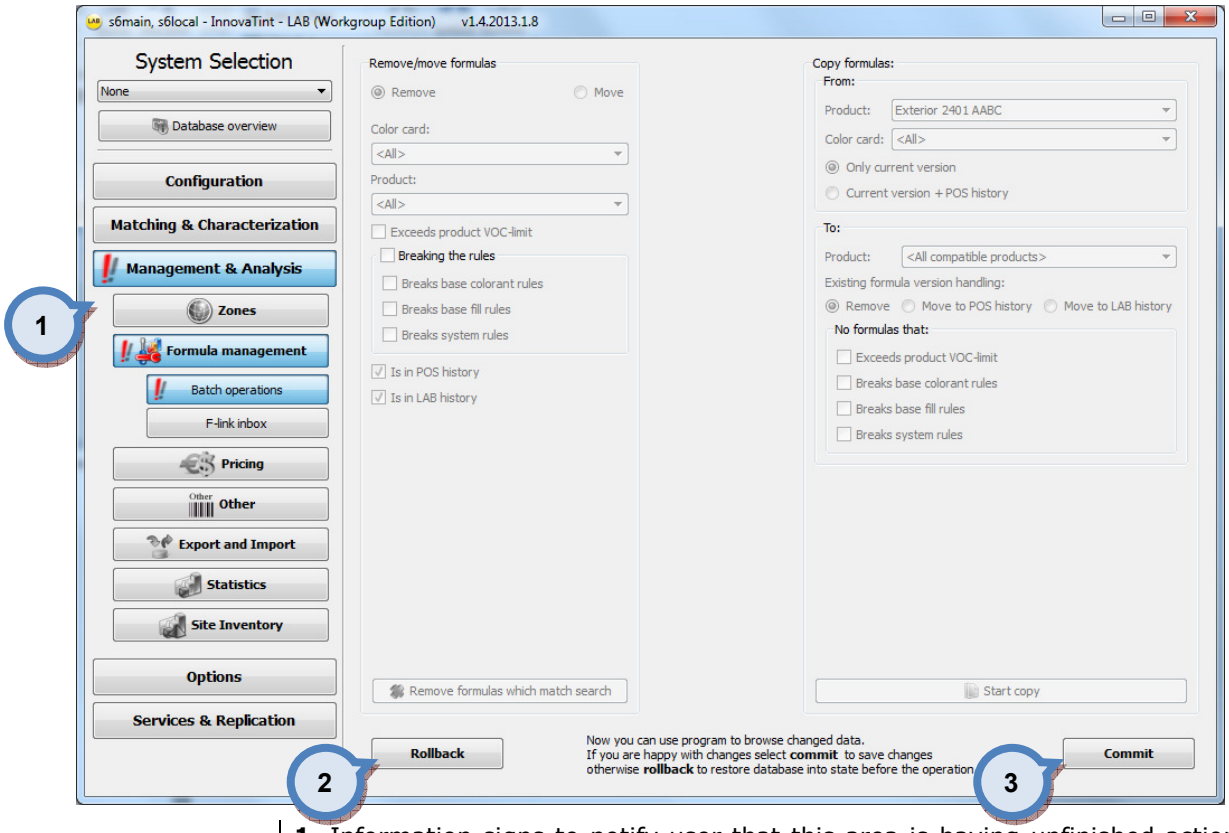
5.No formulas that is an area to set exception rules, type of formulas that can't be copied. Possible limiters are, Exceed product VOC-limit, Breaks base colorant rules, Breaks base fill rules and breaks system rules

6.Start copy: Button to start action

When the (6) action button is clicked, following window will be shown:



It will inform effected product and their colors. After clicking "OK", following options are available:



1. Information signs to notify user that this area is having unfinished actions, which requires decision. During this status, it is possible to move around different areas of software, but database changes are not allowed.

2.Rollback: Rollback button to cancel remove/move action.

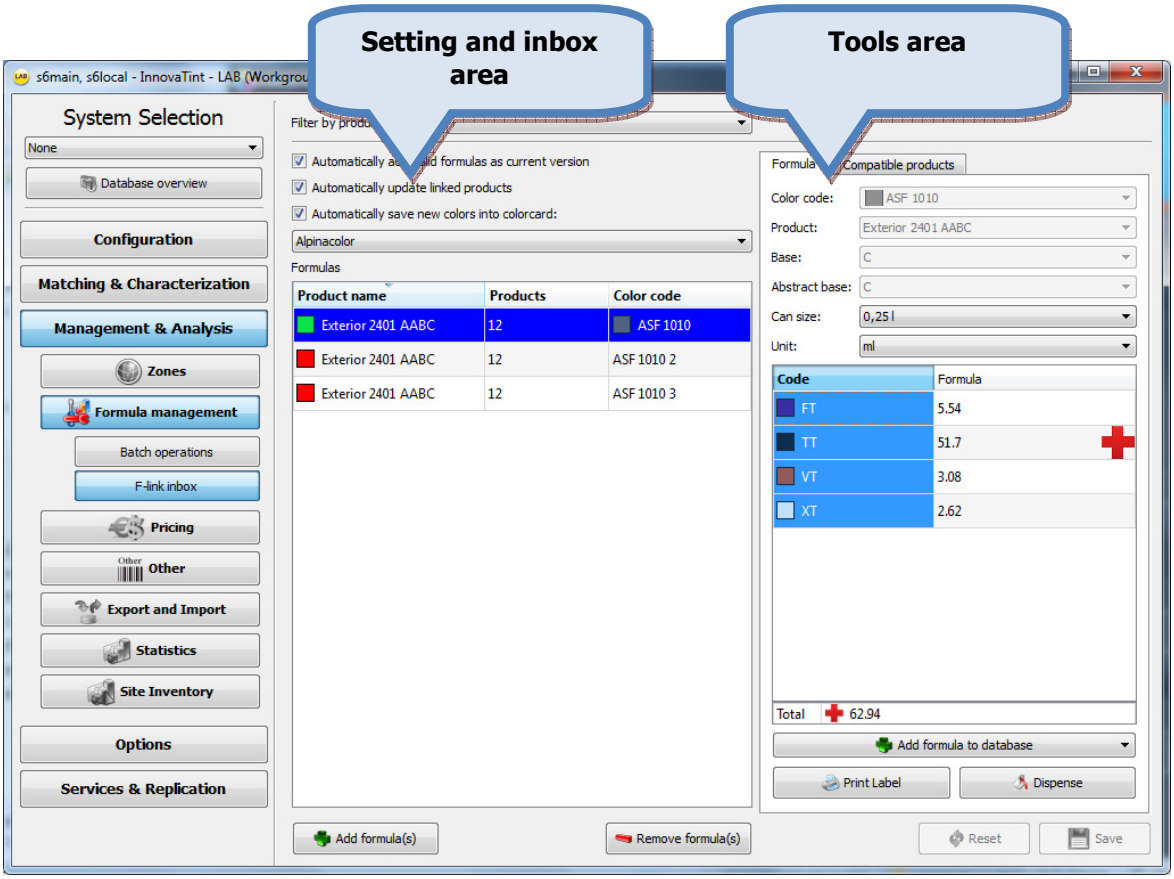
3.Commit: Commit button to finalize remove/move action.

4.2.2 F-link inbox

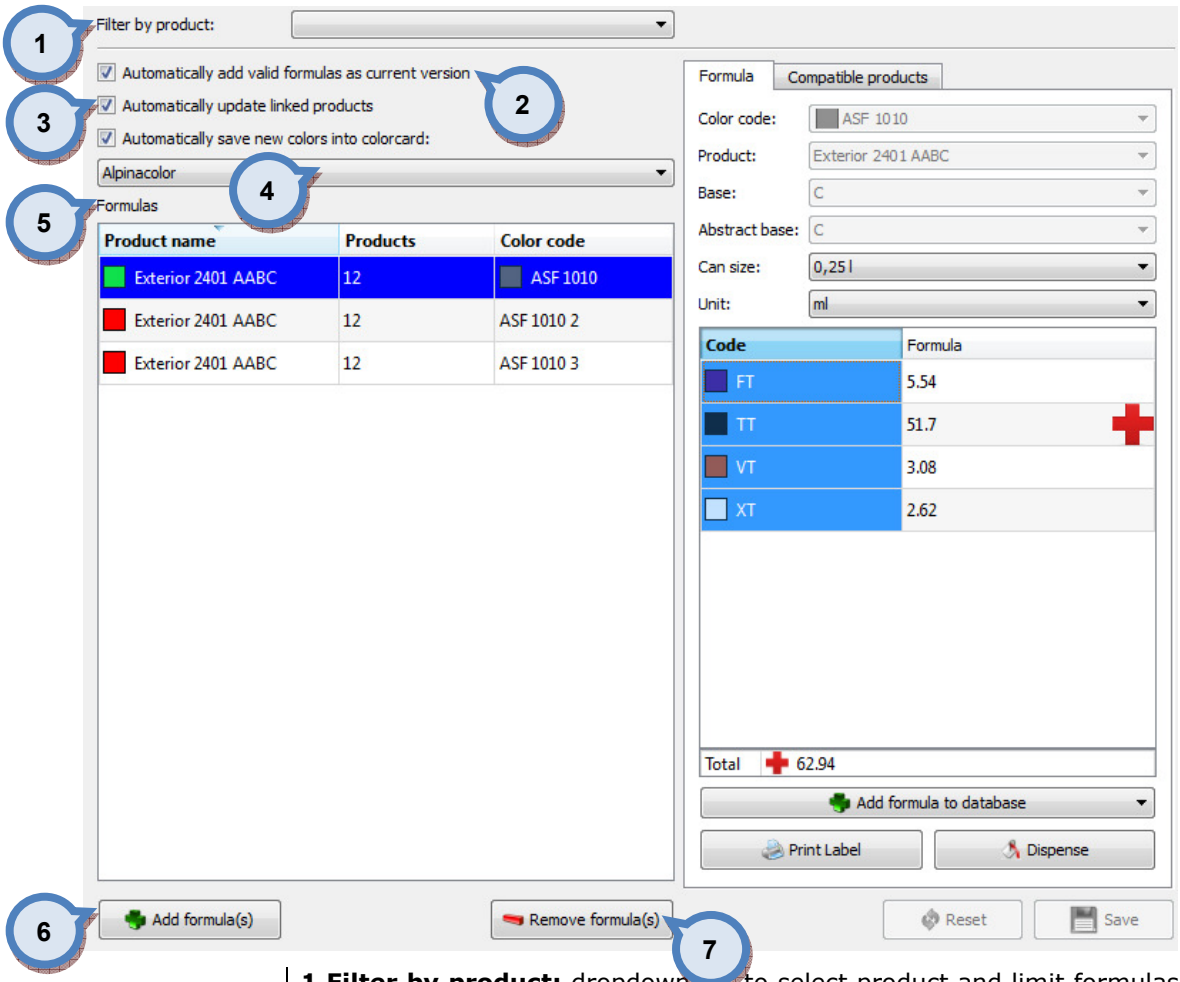
To manage batch operations, navigate into the **Management & Analysis ⇨ Formula management > F-link inbox** page.

F-link page is made to allow InnovaTint LAB to be connected to an external management system, for example ERP, that is capable to send formulations in flink format, and which are supposed to be saved into the InnovaTint database.

See Options – Applications for further information to setup f-link inbox.



In F-link inbox page following options in settings and inbox area are available:



1.Filter by product: dropdown list to select product and limit formulas on the inbox.

2.Automatically add valid formulas as current version: if check box enabled in coming formula will be approved directly into the database. **note:** formula may not violate any matching rules.

3.Automatically update linked products: if the checkbox is enabled, approved formula will be updated to all possible products, which shared the previous formula (or could use the formula)

4.Automatically save new colors into colorcard: If the checkbox is enabled new formula, its color code, will be added to the selected color card if not found from the other color cards. Use the dropdown list to select color card.

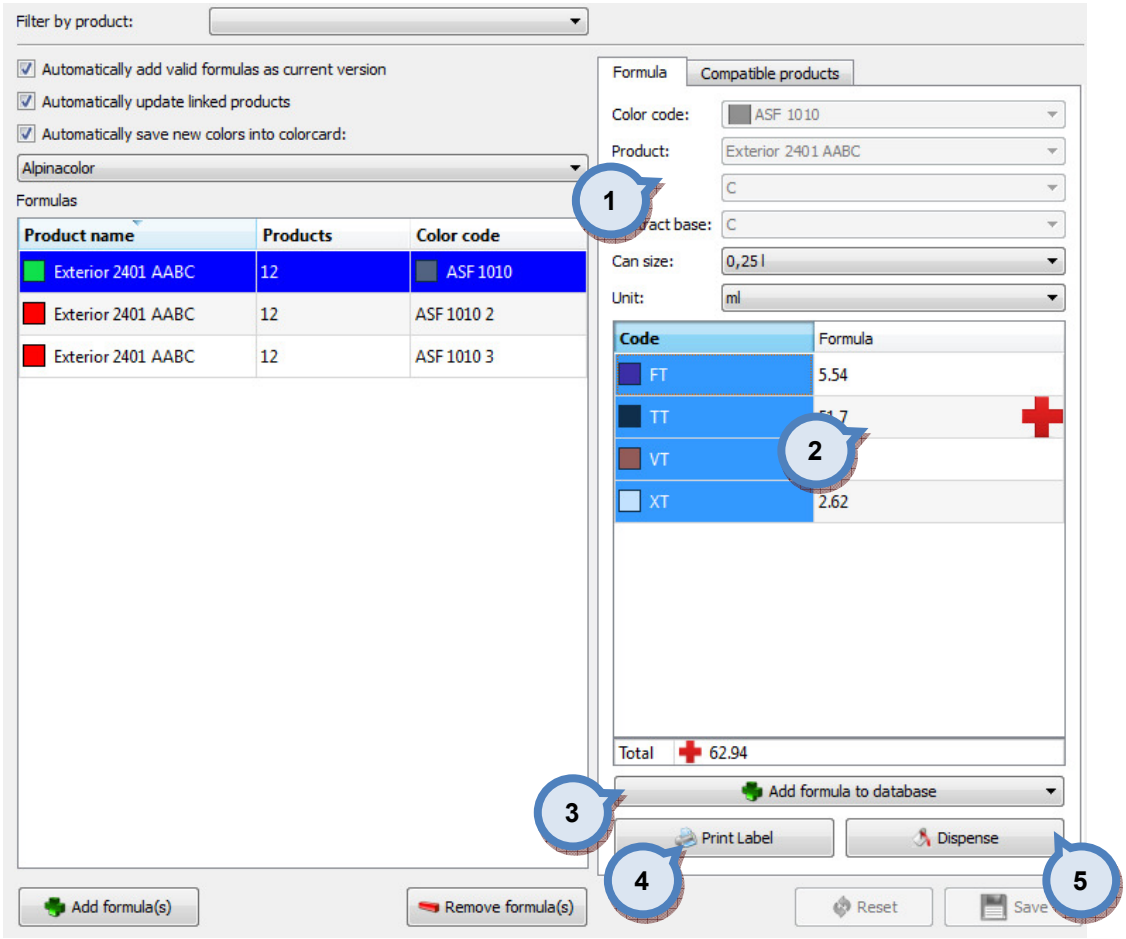
5.Formulas: Table to contain information about all formulas in the inbox. Table holds information about the product where the formula is assigned, number of other products that could use the formula and color code where the formula belongs to.

Product cell will inform with traffic lights if the flink formula is properly formatted, green all OK, Red means missing or invalid information. See also next page for matching rules checking.

6.Add formula(s): Button to save selected formulas into the database.

7.Remove formula(s): Button to remove selected formulas from inbox.

In F-link inbox page, Tools area is divided for Formula and Compatible products tabs, formula tab has following options available:



1.Area for color and product information

2.Table presenting formula and possible violations of matching rules.

3.Add formula to database: Button to add selected formula into the database. Button has multiple options to choose from, these are;

-Move formula to POS order queue

-Add formula into database current version

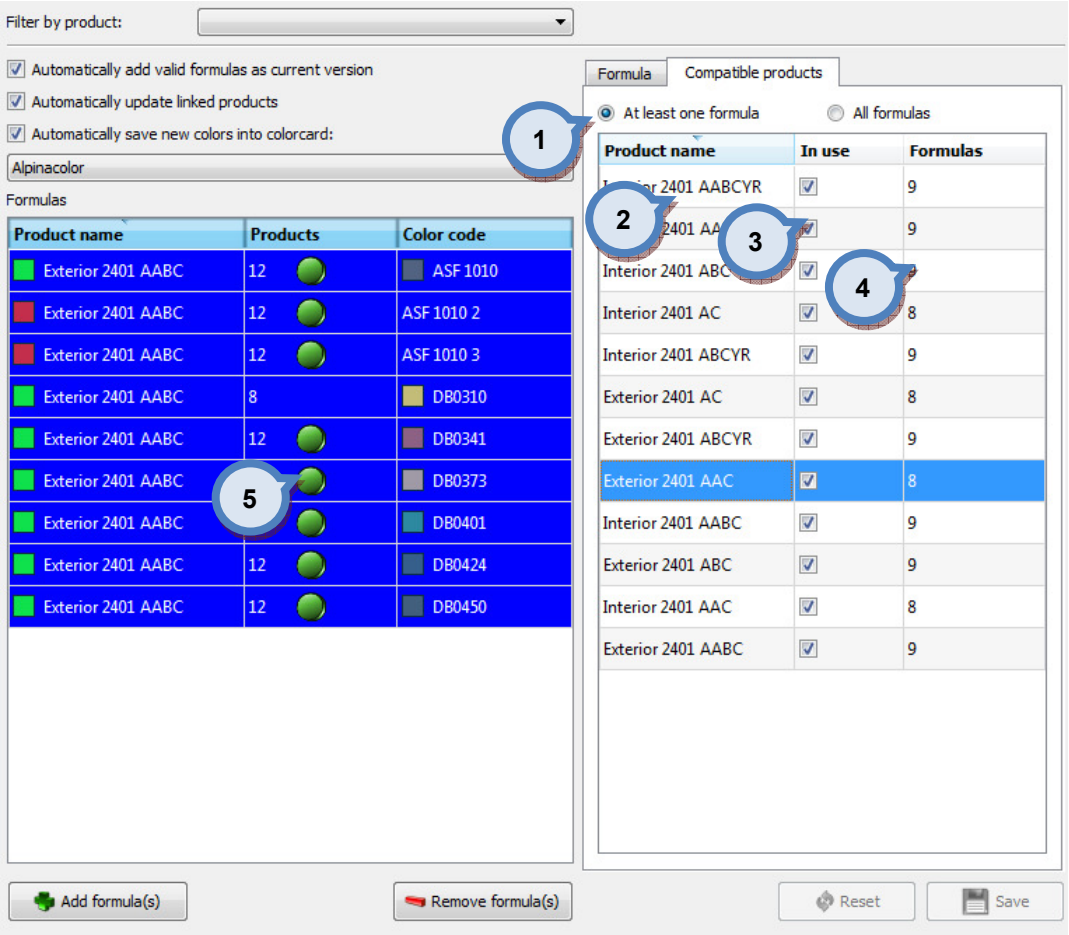
-Add formula into database POS history

-Add formula into database LAB history

4.Print label: Button to print label

5.Dispense: Button to send formula to the dispenser.

In F-link inbox page, Tools area is divided for Formula and Compatible products tabs, Compatible products tab has following options available:



1. Radio buttons to select which compatible product would be shown. Options are:

-At least one formula; where all the products, which can accommodate at least one of the selected formulas in formula table on left.

-All formulas; where only those products that can accommodate all the selected formulas in formula table on left.

2.Product name: Product name that can be used with the selected formula

3.In use: check box to select product to use formula

4.Formulas: Number of formulas that could be used from the selection.

5.Formula table shows with traffic lights suitable formulas if a product is selected on the product table.

4.3 Pricing

To set pricing for colorants, paint cans, and base paints, navigate into the **Management & Analysis ⇨ Pricing** page.

In pricing page you can:

- Set prices for colorants, cans, and products
- Set price groups
- Copy prices from one zone to another zone
- Set locks

All prices in Innovatint are shown with the currency symbol that has been defined in Windows Control Panel. To change, click Start button on Windows Task Bar, then **Settings ⇨ Control Panel ⇨ Regional Settings ⇨ Currency**.

Price calculation is driven by a number of parameters that may be inserted to the PRICE_xxx tables in the main db, and in the corresponding LPRICE_xxx tables in the local db.

If the same parameter is found in multiple tables, the value from the highest priority table is used, according to this order:

PRICE_COMMON (lowest priority)

PRICE_CANSIZE

PRICE_PRODUCT

PRICE_BASE

PRICE_CAN

PRICE_PRODUCT_COLOUR (only in main db)

PRICE_CNT (highest priority)

Values in the local db have priority over the main db, unless the parameter is locked in the main db by inserting the parameter name in PRICE_LOCK. In that case the corresponding values in local db are ignored.

Missing parameters are assumed value of 0, except the rounding steps which default to 0.01.

The following table lists all parameters and the tables where each might be inserted in typical usage:

Parameter	Description	PRICE_COMMON	PRICE_CANSIZE	PRICE_PRODUCT	PRICE_BASE	PRICE_CAN	PRICE_PRODUCT_COLOUR	PRICE_CNT
TAX	Tax rate	✓		✓				
CTAX	Tax rate on colorants, if different	✓						
TINTFEE	Tinting fee	✓	✓	✓				
BCOST	Base cost per can					✓		
BCOSTL	Base cost per litre (for custom can size)				✓			
BMARGIN	Base margin rate	✓		✓	✓		✓	
BPRICE	Base price					✓		
CCOST	Colorant cost							✓
CMARGIN	Colorant margin rate	✓						✓
MRP	Maximum retail price					✓		
BROUND	Rounding step for base price	✓						
CROUND	Rounding step for colorant price	✓						
LROUND	Rounding step for list price	✓						
PROUND	Rounding step for (final) price	✓						
USEPG	Enable price groups (non-zero value)	✓		✓				
PGLIMIT	Price group limit (colorant cost/nominal quantity, in l or kg) for each price group	✓		✓	✓			
PGCPRICE	Colorant price according to price group		✓					
PGPRICE	Total list price according to price group					✓		
PGBC	Barcode of price group		✓			✓		

Tax and margins are inserted as numbers between 0 and 1. Tax is relative to tax-free price and margin is relative to selling price.

Output and calculations

Price groups disabled

Prices without tax, assuming all rounding steps = 0. Discount rate is a user input.

Base cost = BCOST if available, or BCOSTL * Base volume

Base price = BPRICE if available, or Base cost / (1 – BMARGIN)

Base margin = Base price – Base cost

Colorant cost = Σ CCOST * Colorant volume

Colorant price = Σ CCOST * Colorant volume / (1 – CMARGIN)

Colorant margin = Colorant price – Colorant cost

Tinting fee = TINTFEE

Price of tinting = Tinting fee + Colorant price

List price = Base price + Price of tinting

Discount = –Discount rate * List price

Price = List price + Discount [Note: Discount ≤ 0]

Cost = Base cost + Colorant cost

Margin = Price – Cost

Price per litre = Price / Total volume of tinted paint

Price per kilogram = Price / Total mass of tinted paint

Tax-inclusive prices are generally the above multiplied by (1 + TAX). If rounding is enabled, it is applied to the tax-inclusive price, and the price before tax, and margin, are calculated backwards from there. If CTAX is set, it applies to Price of tinting, and TAX applies to Base price.

If MRP is set and the above calculations would make List price including tax greater than MRP, List price is set to MRP and Margin is adjusted accordingly.

Price groups enabled

Price group is determined after calculating Colorant cost. Each price group is numbered and associated with a PGLIMIT value. The formula is assigned the lowest numbered price group having PGLIMIT ≥ (Colorant cost / Nominal quantity in litres or kilograms). If none of the groups meet this criterion, the highest numbered price group is assigned.

The price group number is used to look up PGPRICE and PGCPRICE. These have the following effect on the price calculations:

If PGPRICE has been set:

List price = PGPRICE

Price of tinting = List price – Base price

Colorant price = Price of tinting – Tinting fee

Otherwise, if PGCPRICE has been set:

Colorant price = PGCPRICE

Otherwise:

Colorant price = PGLIMIT * Nominal quantity in litres or kilograms / (1 – CMARGIN)

All other prices are calculated using the same formulas as in the section Price groups disabled.

Price analysis

The price analysis shows the relative contributions of base cost, colorant cost, margin and tax to the final tax-inclusive price.

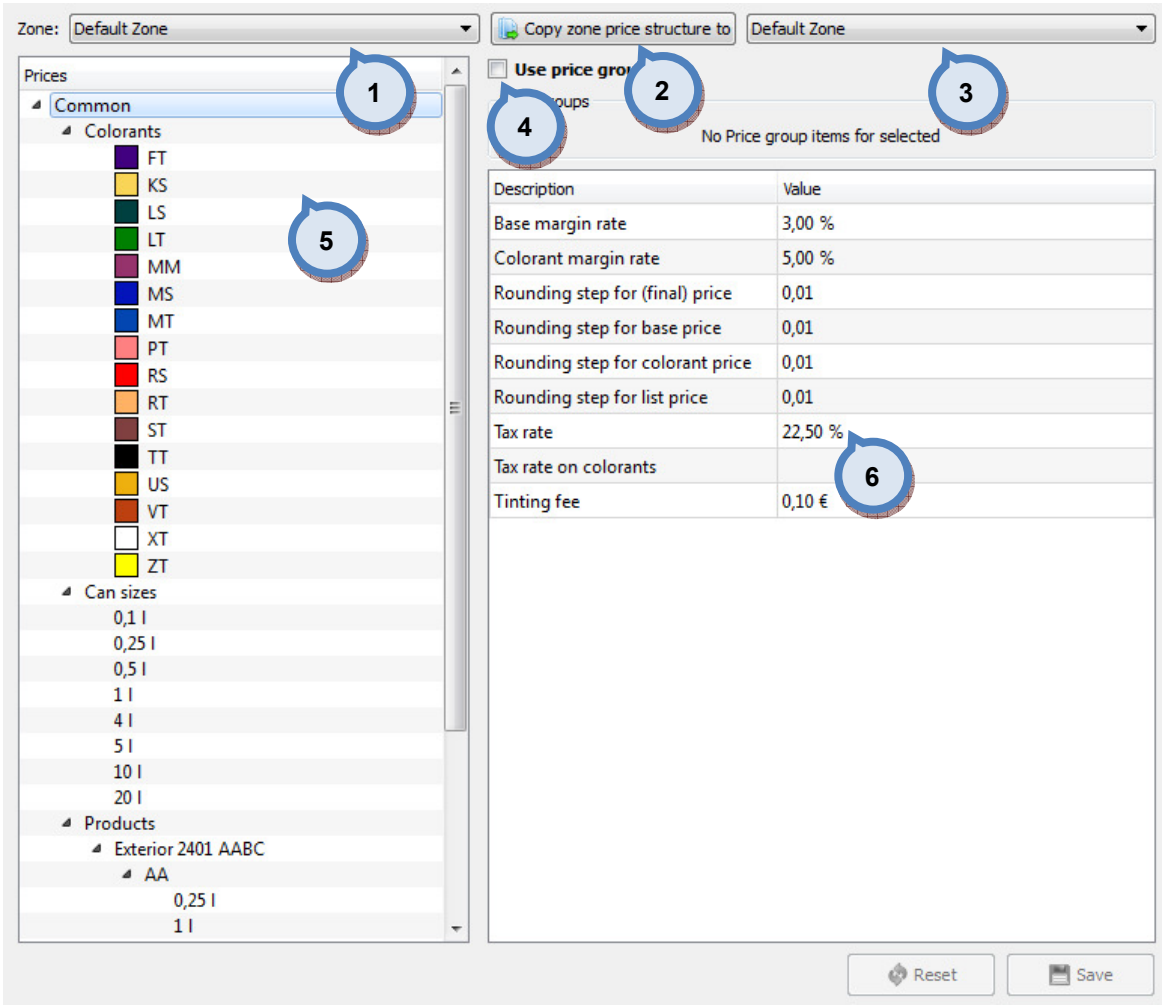
It is possible that some or all items are disabled through the Innovatint LAB software using the "LOCKS" function. This will prevent using the Custom values instead of the predefined values. In this case, user can input a new value to the table, but it will not be saved into the local database.

The rounding of values are done according to the following example:

1.012 -> 1.01

1.015 -> 1.02

On the **Pricing** page, you have the following options available:



1.Zone: The drop down list to select a zone.

2.Copy zone price structure to: The button to copy the price structure of the selected (1) zone into the other zone selected from the drop down list (3).

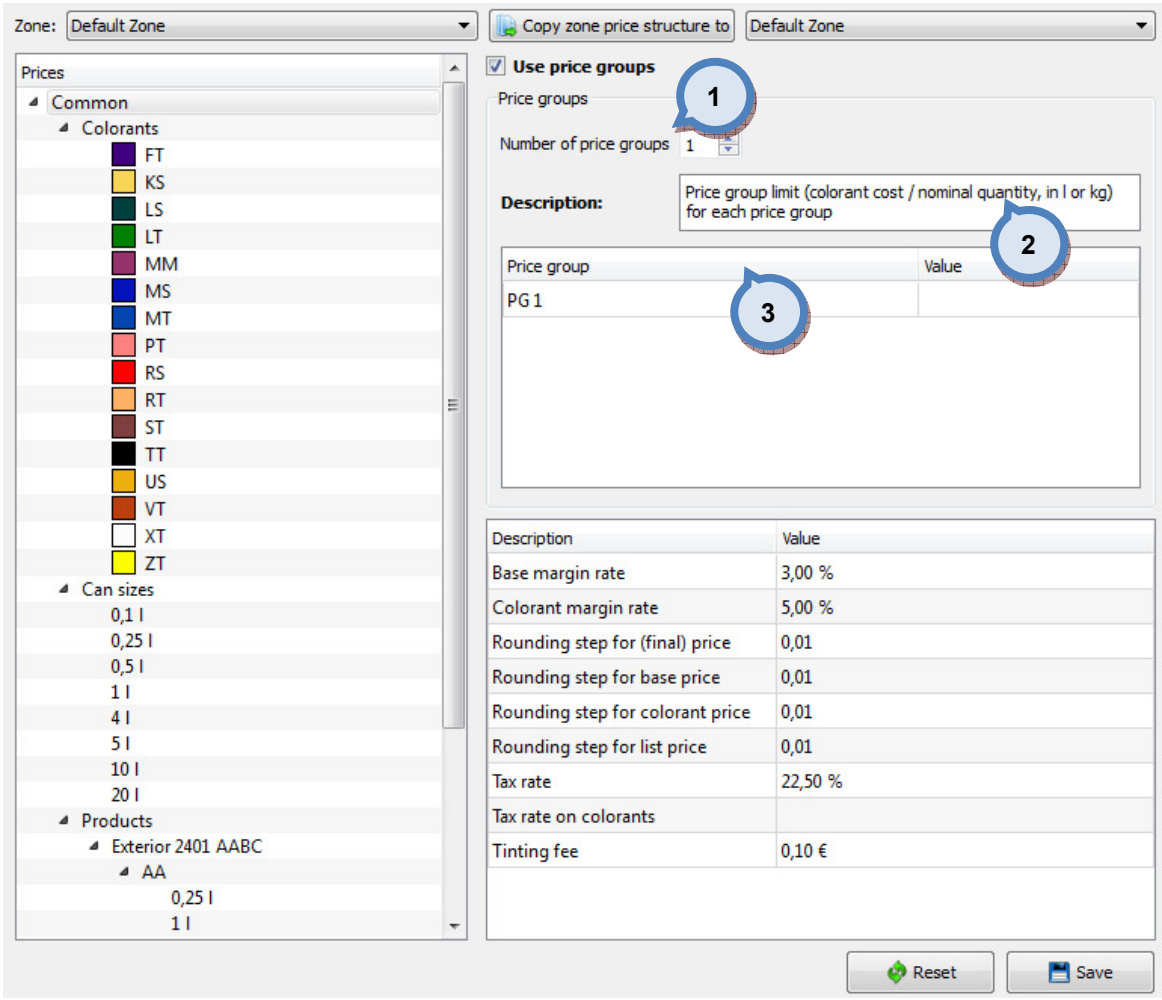
3.The drop down list to select a zone into which zone pricing structure is copied into.

4.Use price groups: When the check box is enabled, the price groups are used.

5.Prices: The list of the colorants, can sizes, products, locks, and colors.

6.The table to display values for the pricing options.

When the **Use price groups** button is clicked, the following options are available:



1.Number of price groups: The selector field to set the number of the price groups.

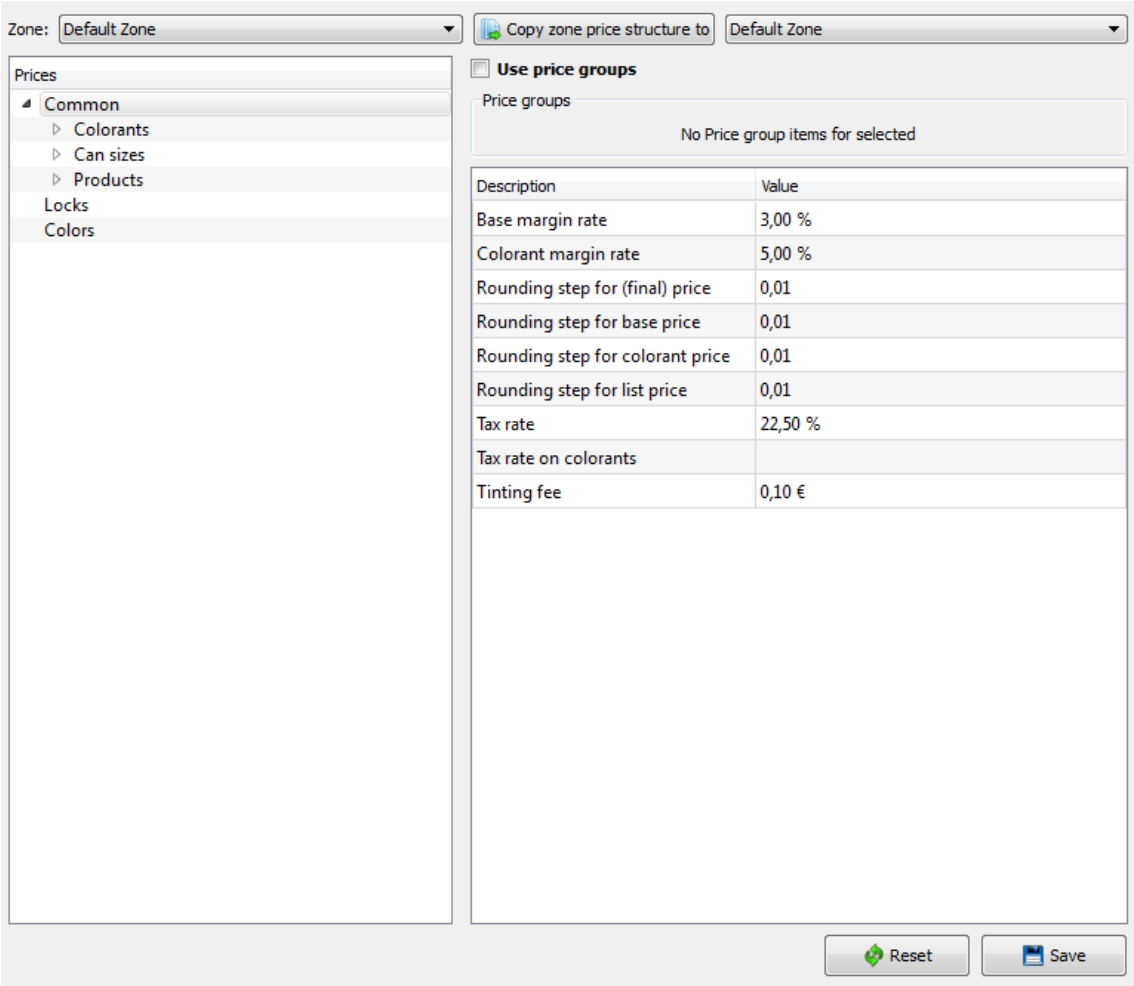
2.Description: The text field for the description of the price group rule.

3.The list of the price groups with 2 columns:

Price group: The name of the price group

Value: The value of the price group rule as described in the Description field (2).

In the **Common** level user can define the following Custom values into the Value column:



Base margin rate:

Colorant margin rate:

Rounding step for (final) price: (default value is 0.01)

Rounding step for base price: (default value is 0.01)

Rounding step for colorant price: (default value is 0.01)

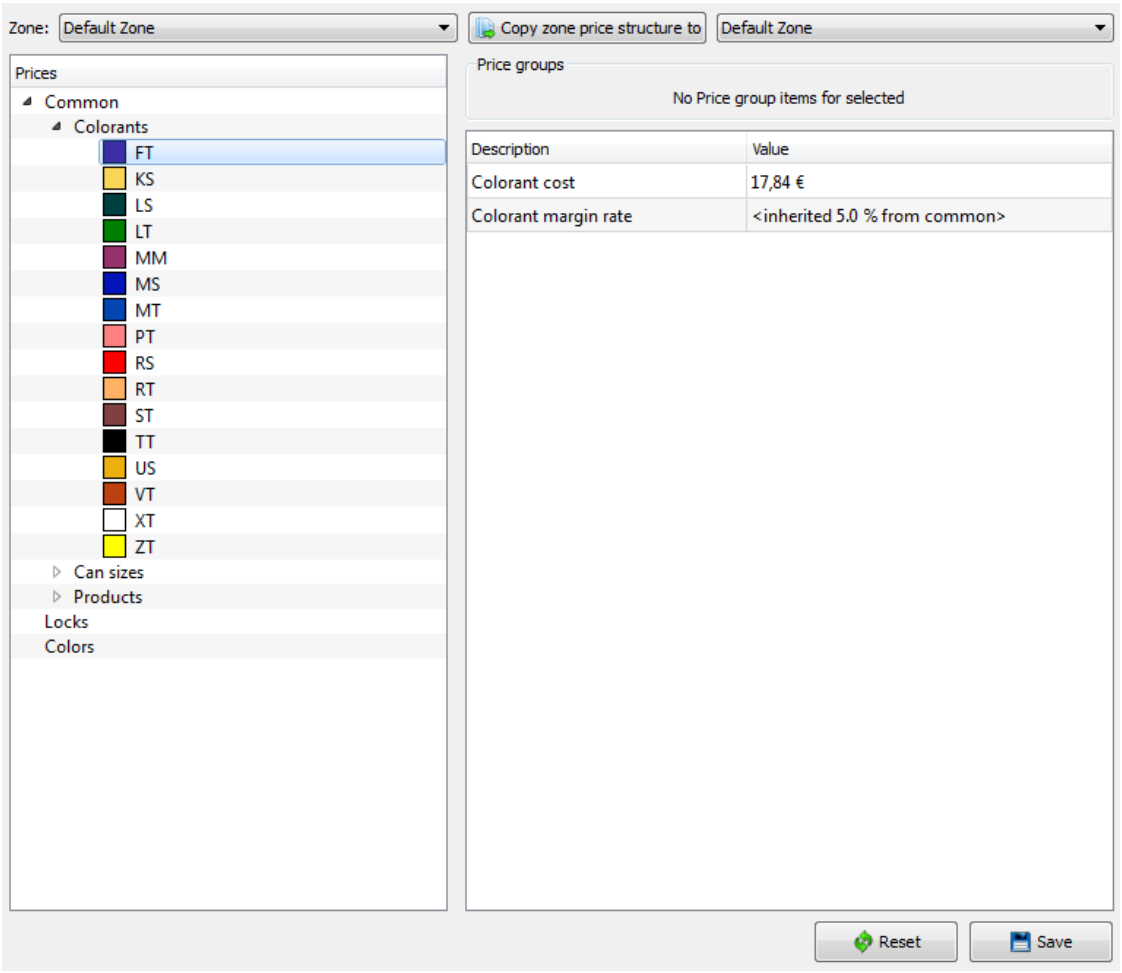
Rounding step for list price: (default value is 0.01)

Tax rate:

Tax rate on colorants:

Tinting fee:

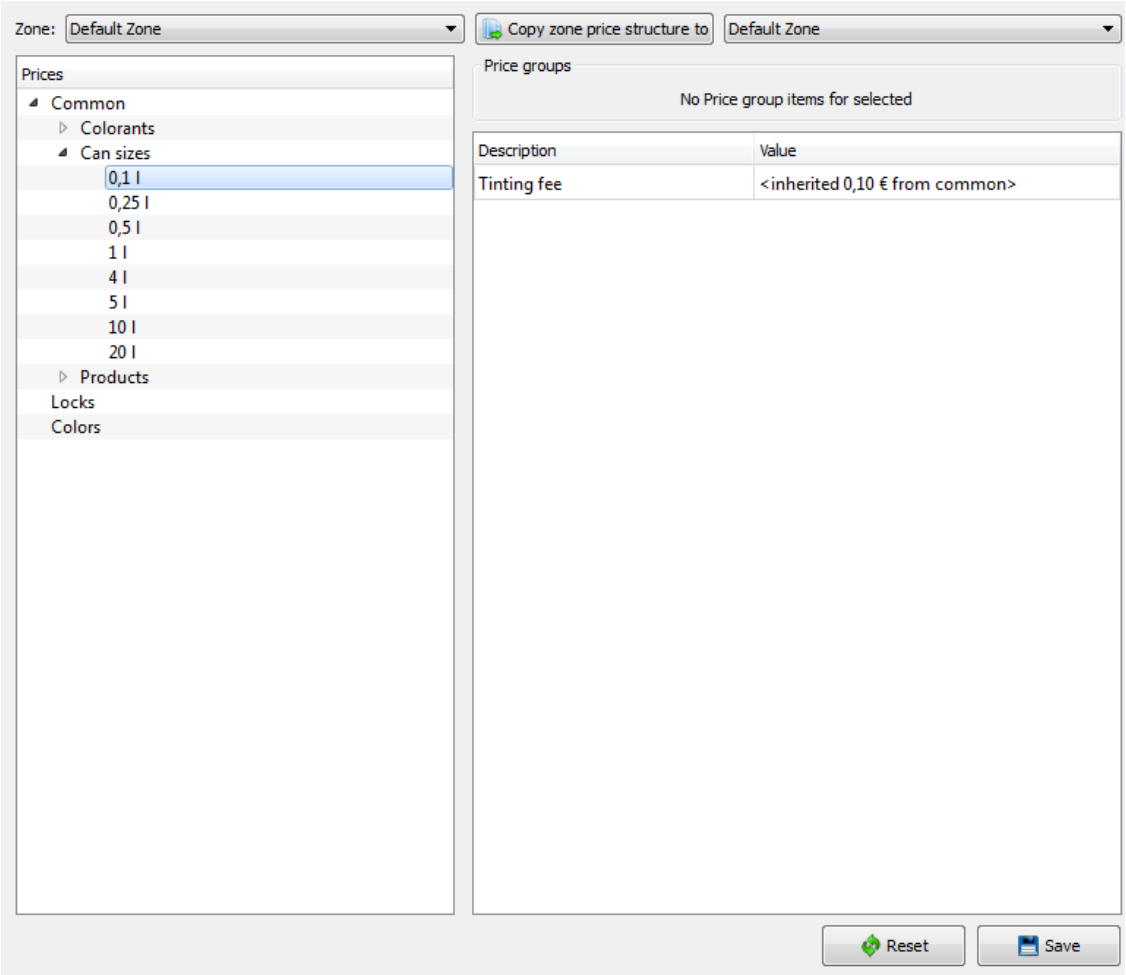
On the **Colorants** level, the user can define the following Values for the each of the colorants in system:



Colorant cost: The (raw material) cost of the colorant.

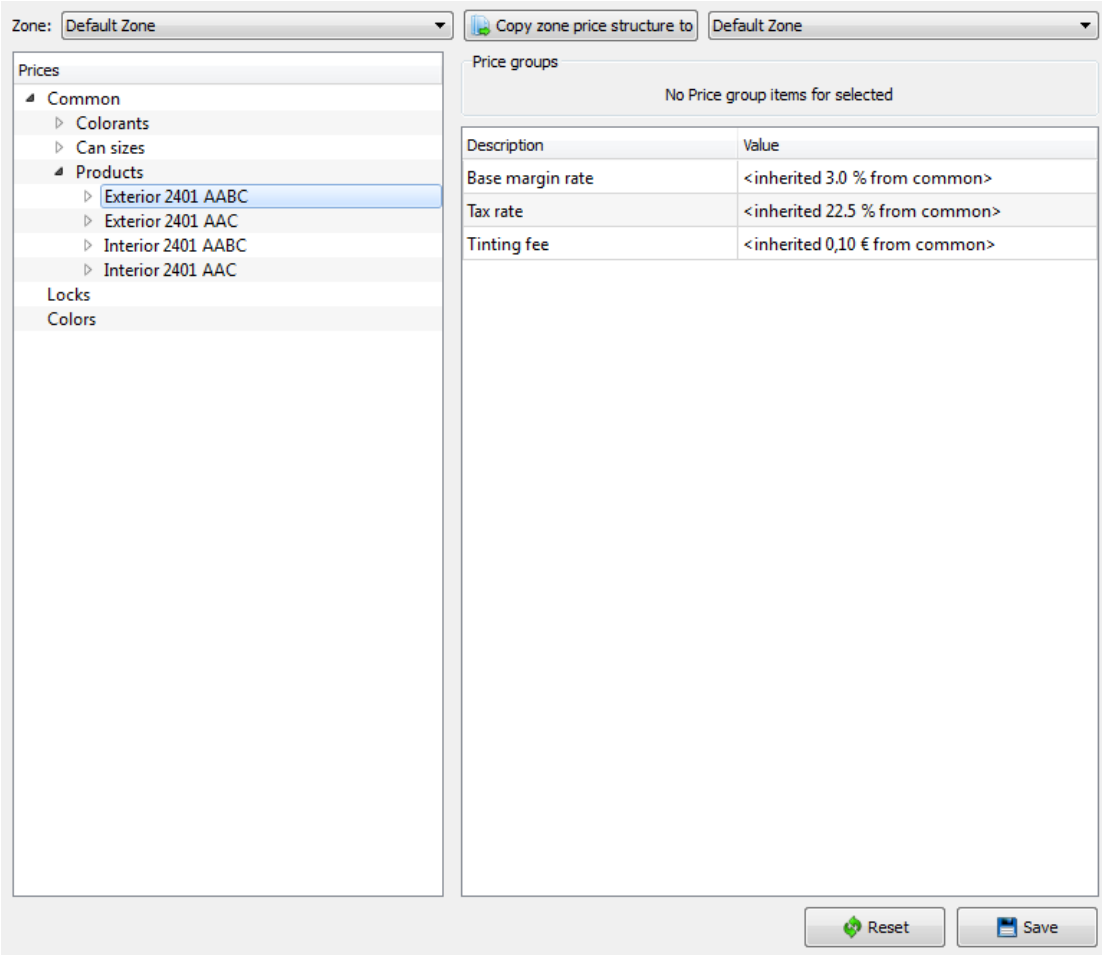
Colorant margin rate: (default value is inherited from common)

On the **Can size** level, the user can define the following Values for the each of the can sizes in system:



Tinting fee:

On the **Products** level, the user can define the following Values for the each of the products in system:

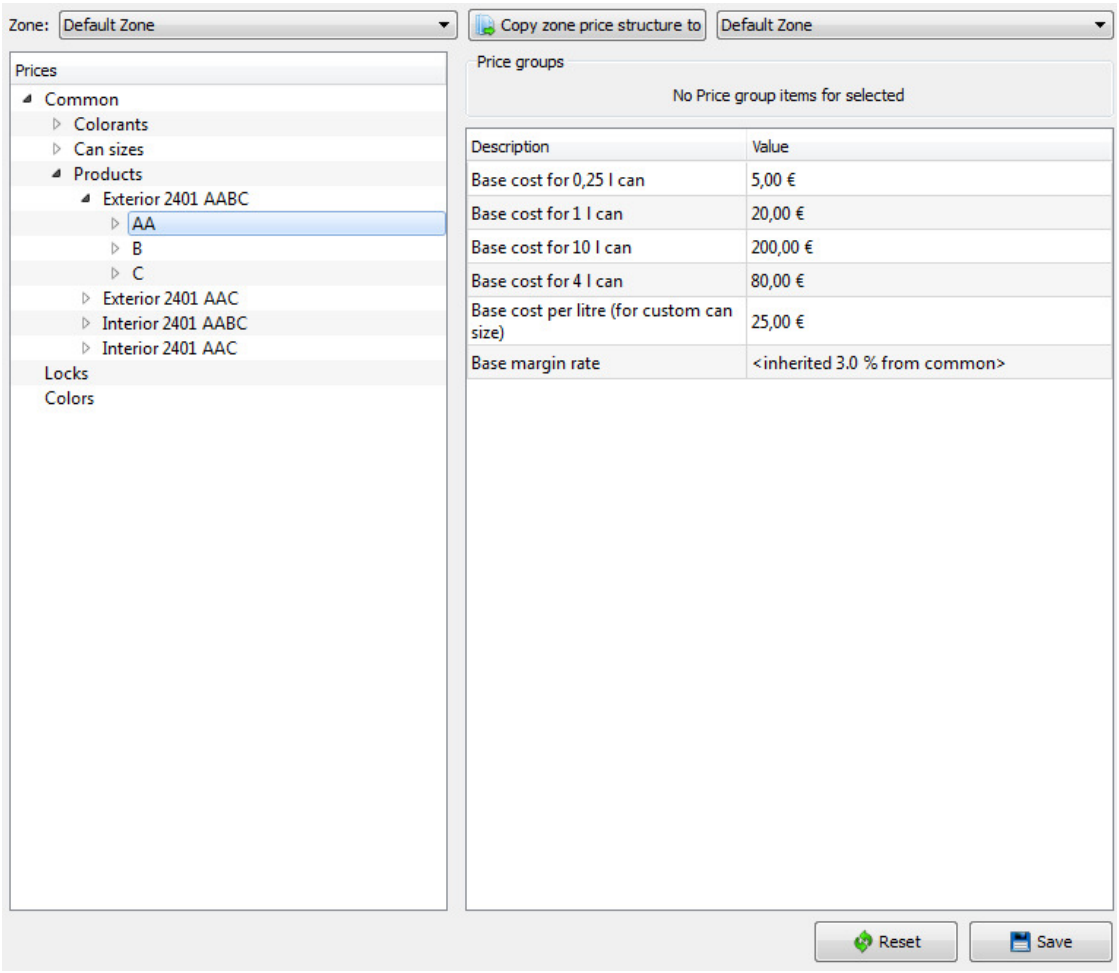


Base margin rate:

Tax rate:

Tinting fee:

On the **Base paint** level, the user can define the following Values for the each of the base paints within each of the products in system:

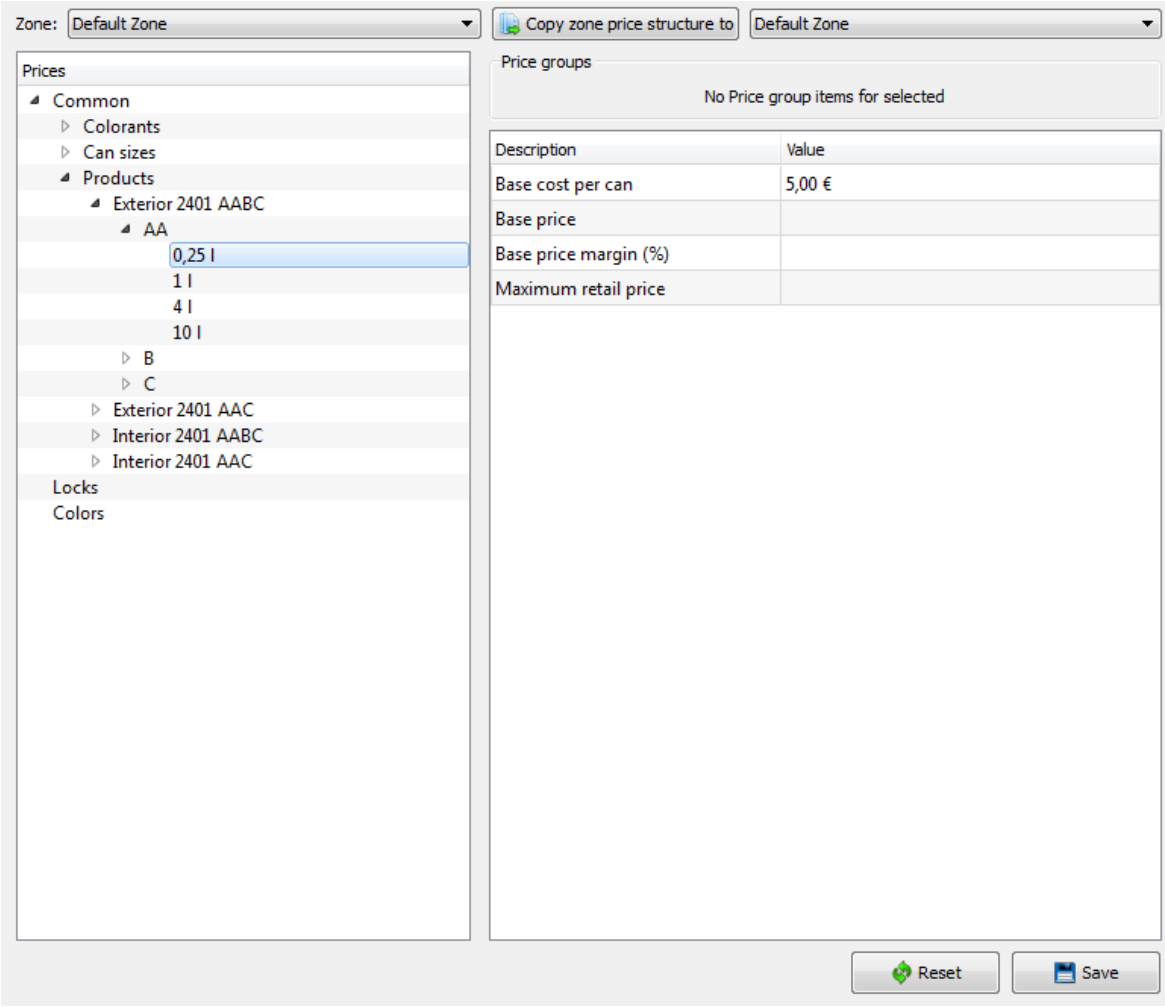


Base cost for X can: where the X is available can size(s).

Base cost per litre (for custom can size):

Base margin rate:

On the **Can size** level, the user can define the following Values for the each of the can sizes for each of the base paints within each of the products in system:



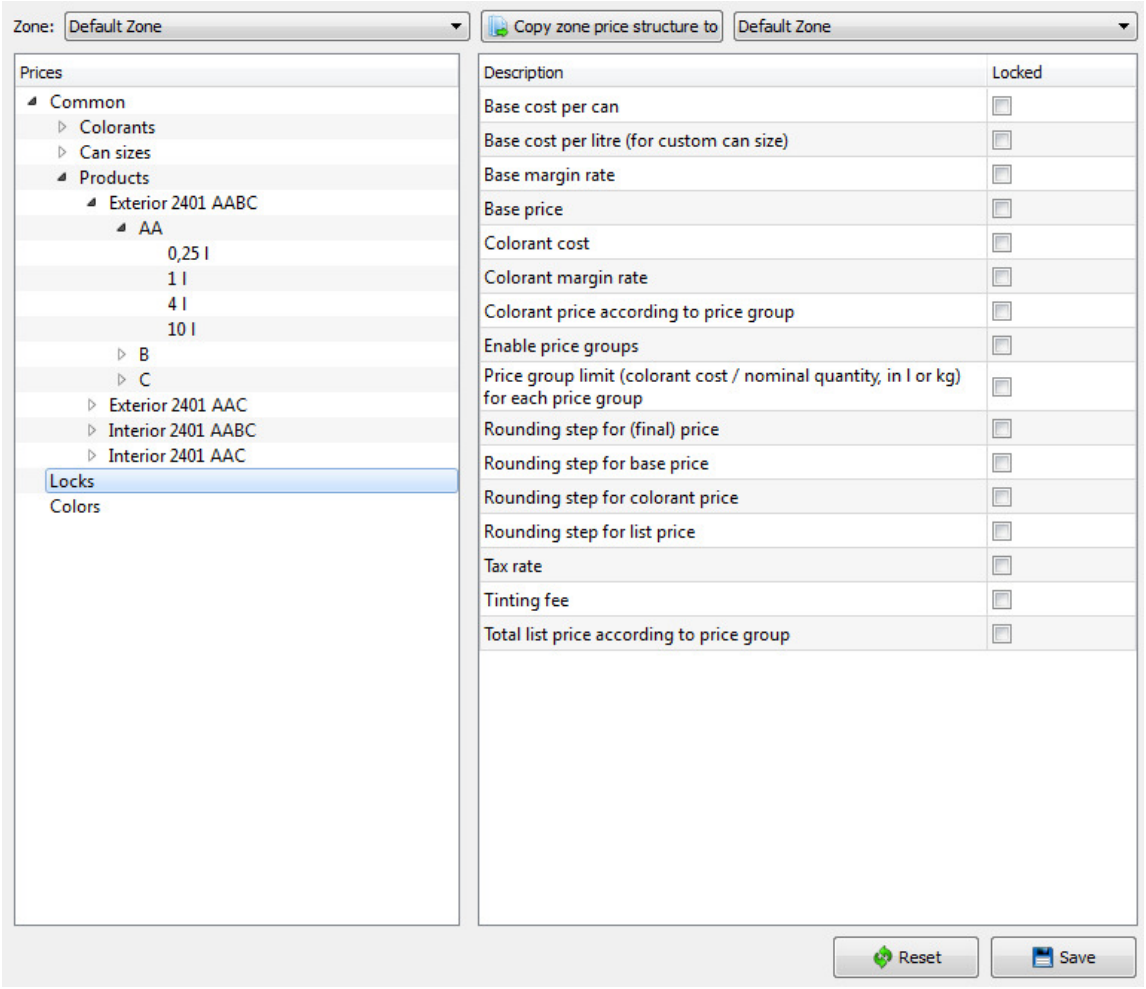
Base cost per can:

Base price:

Base price margin (%):

Maximum retail price:

On the **Locks** level, the user can selects the following items to be not changeable on the POS software.



Base cost per can:

Base cost per litre (for custom can size):

Base margin rate:

Base price:

Colorant cost:

Colorant margin rate:

Colorant price according to price group:

Enable price groups:

Price group limit (colorant cost / nominal quantity, in l or kg) for each price group:

Rounding step for (final) price:

Rounding step for base price:

Rounding step for colorant price:

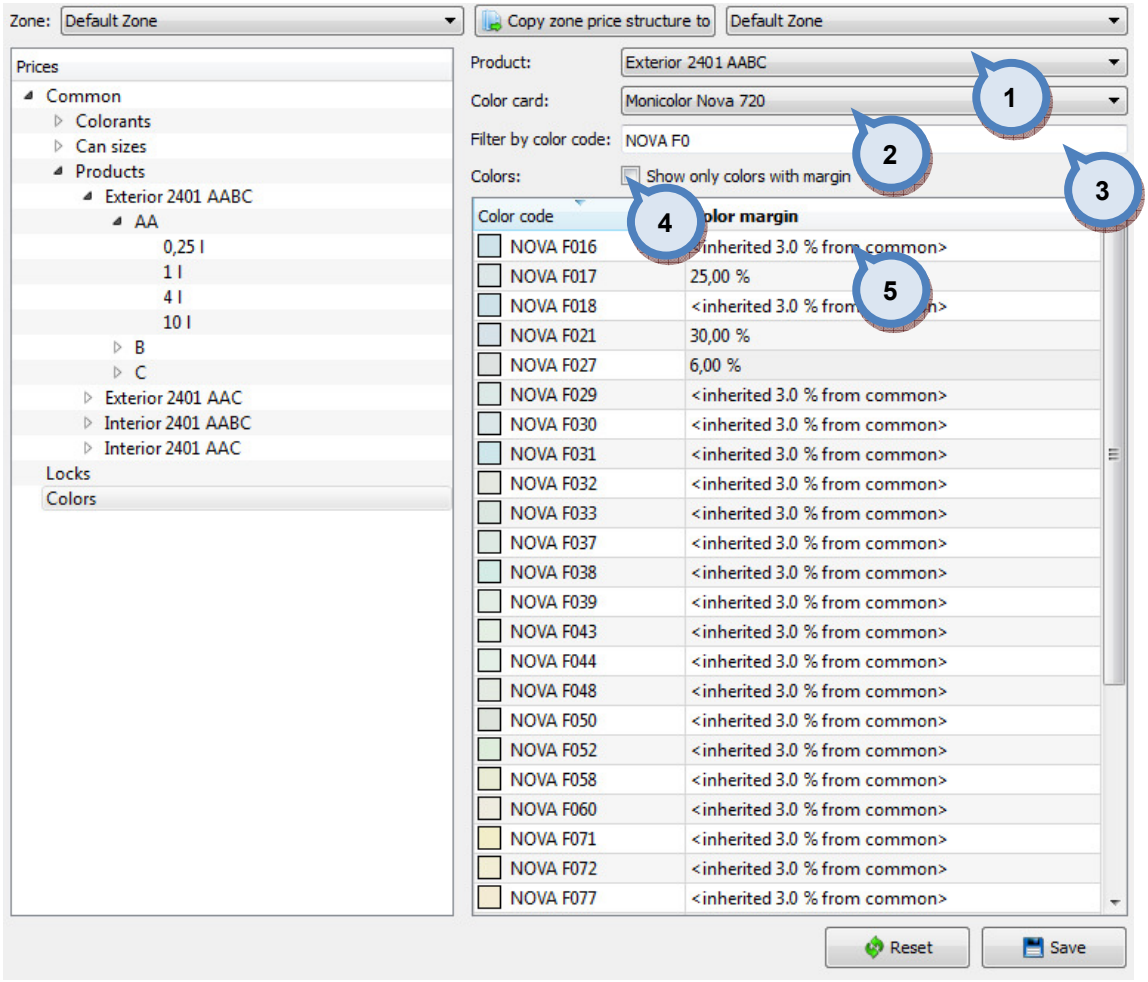
Rounding step for list price:

tax rate:

Tinting fee:

Total list price according to price group:

On the **Colors** level, you have the following options available, and the user can define the following Values for the each of the colors:



1.Product: The drop down list to select a product.

2.Color card: The drop down list to select a color card.

3.Filter by color code: The text field to enter a color code or a part of one.

4.Show only colors with margin: When the check box is enabled, the colors with the set margin are only shown.

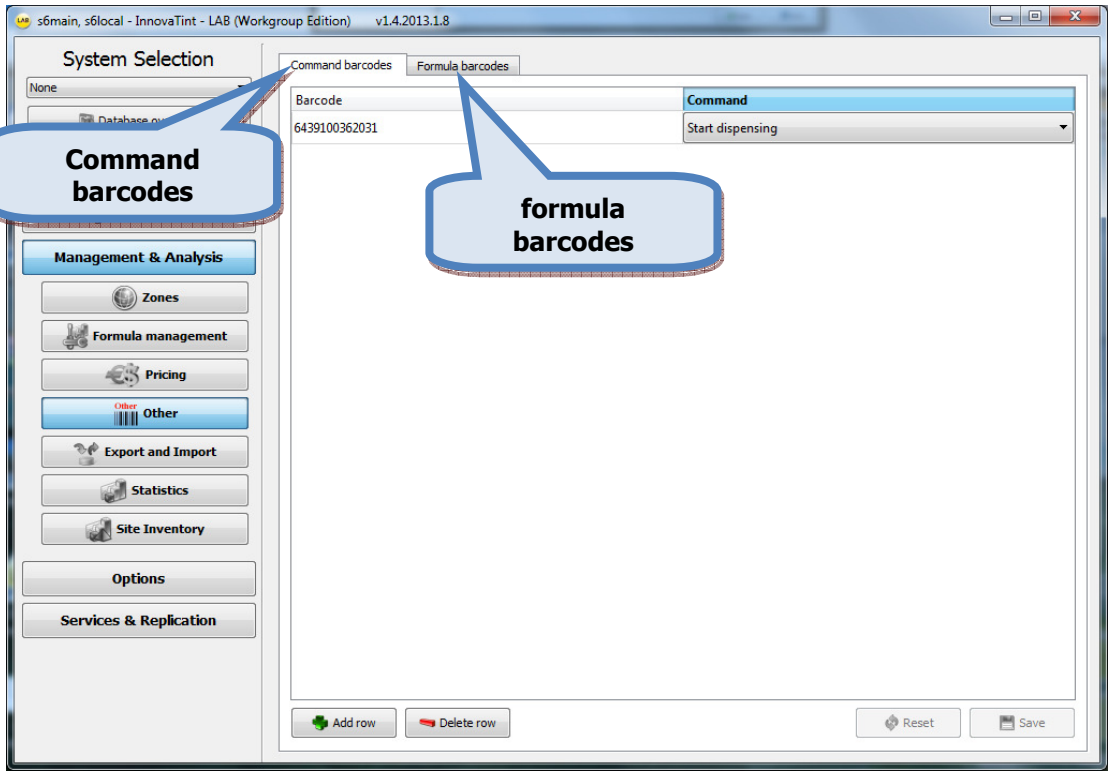
5.Color margin: The field for the color margin.

4.4 Other

To set bar codes to system, navigate into the **Management & Analysis ⇨ Other** page.

On **Other** page you have two tab pages:

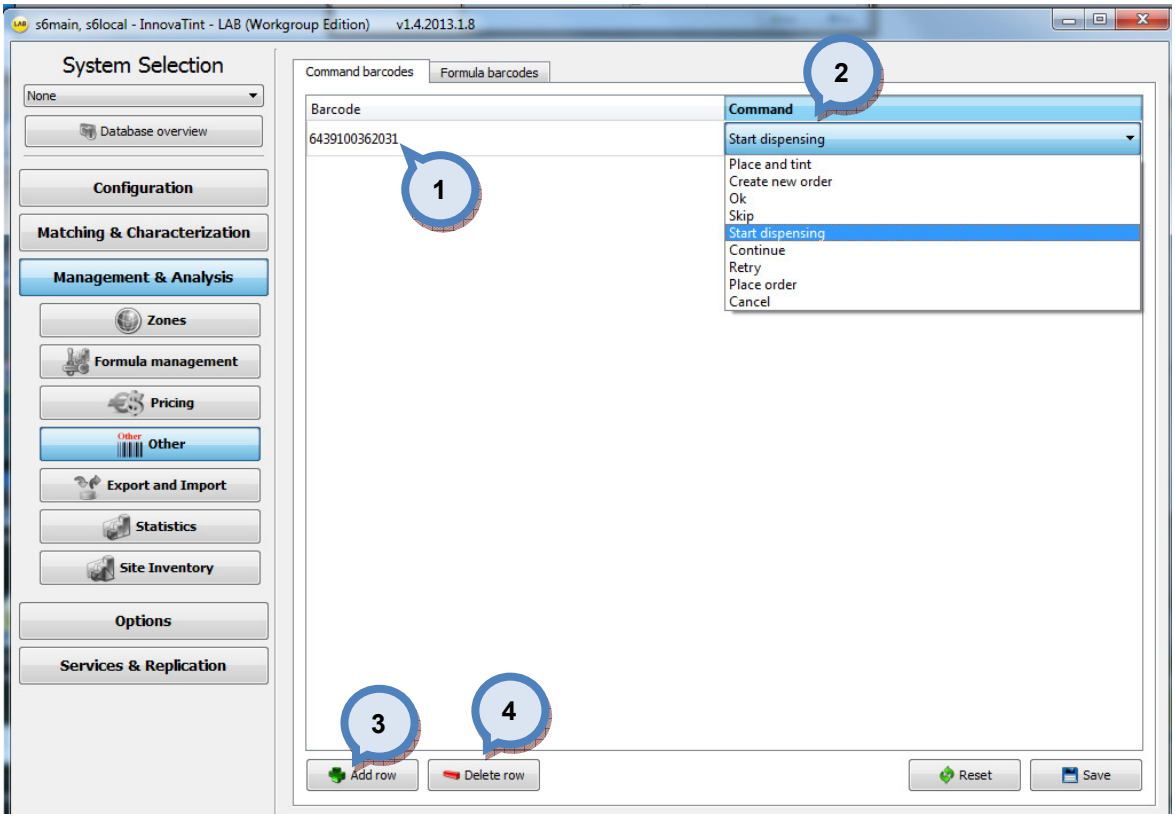
- Command barcodes
- Formula barcodes



On **Command barcodes** page you can:

- Create and edit bar codes

On the **Command barcodes** page, you have the following options available:



1.Barcode: The column to display a bar code

2.Command: The column to display a command to be executed when bar code is read. The commands available are:

Cancel

Continue

Create new order

Ok

Place and tint

Place order

Retry

Skip

Start dispensing

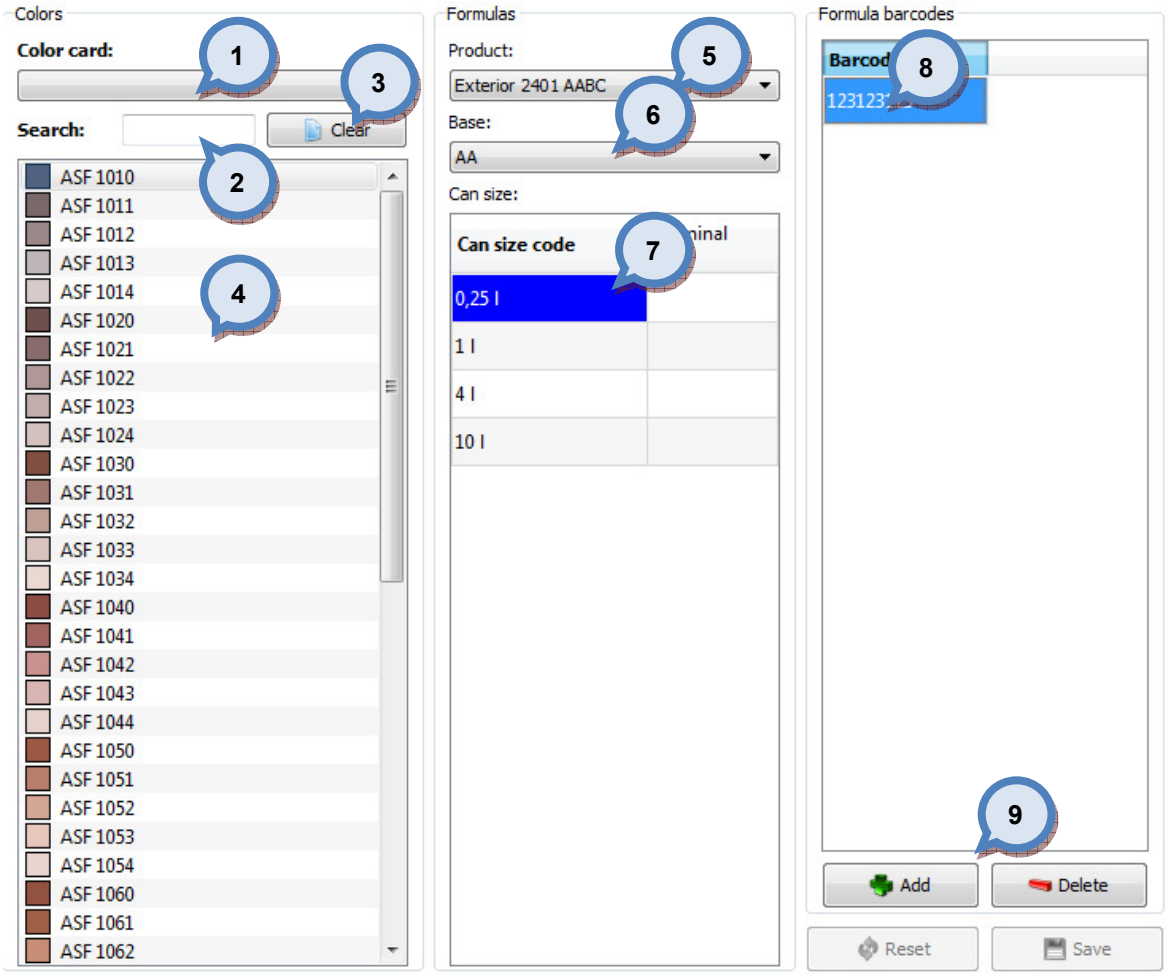
3.Add row: The button to add a new bar code.

4.Delete row: The button to delete a selected bar code.

On **Formula barcodes** allows to create an order (in POS system) with the single barcode measurement. On this page you can:

- Create and edit bar codes for the color-product-base paint-can size combinations.

On the **Formula barcodes** page, you have the following options available:



1.Color card: The drop down list to select a color card.

2.Search: The search field to search a color by typing in the code or name of the color. You can also type part of the code or the name to search a color.

3.Clear: The button to clear all selections made.

4.The list of the colors based on the selection on sections (1) and (2). If no selections made, the whole color list in the database is displayed.

5.Product: The drop down list to select the product.

6.Base: The drop down list to select the base paint.

7.Can size code: The list to select a can size.

8.Barcode: The field for the barcode for the color-product-base paint-can size combination.

9.Add/Delete: The buttons to add a new bar code and delete an existing bar code.

4.5 Export and Import

To export and import databases, navigate into the **Management & Analysis ⇨ Export and Import** page.

In export and import page you can:

- Export and import databases
- Covert databases from one format to another format

Before a local database can be extracted an empty database to write to is needed.

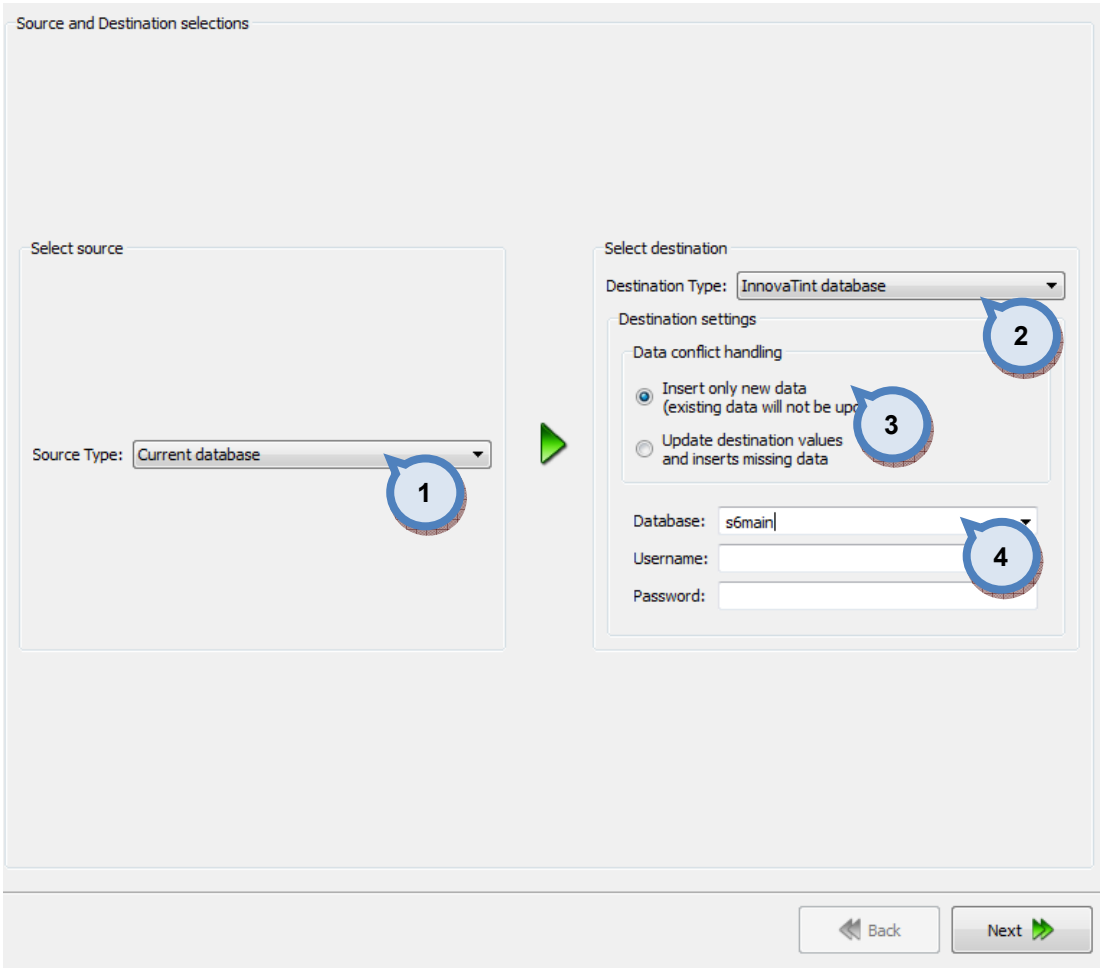
Alternatively, existing database can be updated.

Possible destination data types are depending on the source data type. Options for data export are:

Source type	Destination type
Current database	Innovatint database Fix-file Free text Database installation package Shop installation package Synchronize current minimal Gdata
Innovatint database	Current database
Color Composer 9 database	Current database
G-data (Corob database)	Current database Free text
Fix-file format	Current database
Free text (colorants in rows)	Current database
Colour Composer list	Current database

4.5.1 Export from the current database into the Innovatint database

When **current database** is selected as source type and **Innovatint database** is selected as destination type, the following options are available:



1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database.

3.Data conflict handling: Radio buttons to select type of action required, if destination database has conflicting data on it. Options are:

-Insert only new data

-Update destination values and insert missing data.

3.Destination settings:

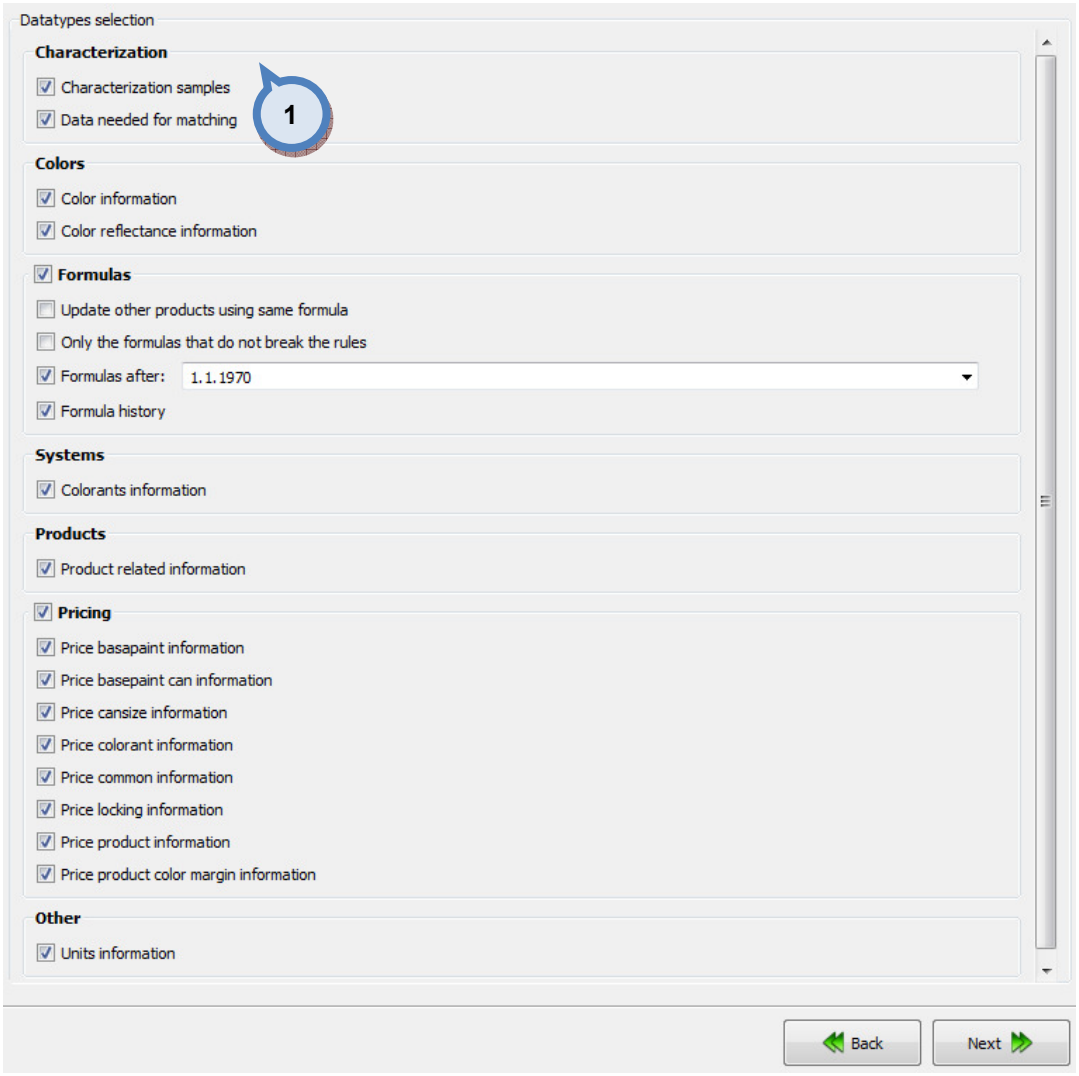
Database: The drop down list to select a destination database.

Username: The field to type in the user name for the destination database.

Password: The field to type in the user password for the destination database.

Next window in the export wizard is: Datatypes selection.

In the **Datatypes selection** page, you have the following options:



1.When check boxes are enabled, the corresponding information is included in to the export file.

Characterizations

- **Characterization samples**
- **Data needed for matching:** When this option is selected, also Colorants information as well as the Color reflectance information has to be included.

Colors

- **Color information**
- **Color reflectance information**

Formulas

- **Update other products using same formula**
- **Only the formulas that do not break the rules**
- **Formulas after:** The text field to type in the date of the oldest possible formula included in to the export file.
- **Formula history**

Systems

- **Colorants information**

Products

- **Product related information**

Pricing

- **Price basepaint information**
- **Price basepaint can information**
- **Price cansize information**
- **Price colorant information**
- **Price common information**
- **Price locking information**
- **Price product information**
- **Price product color margin information**

Other

- **Units information**

Next window in the export wizard is: Zones and Systems checklist

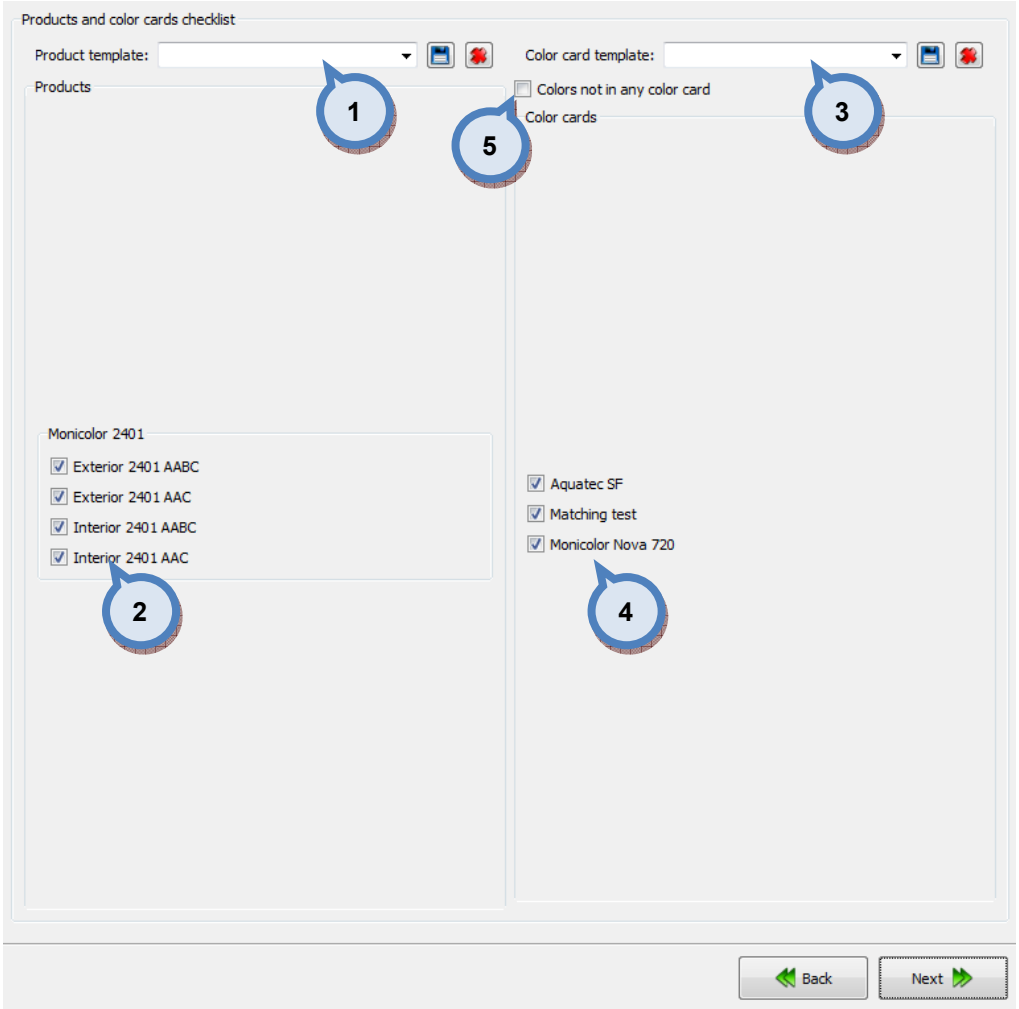
In the **Zones and Systems checklist** page, you have the following options:

1.Zones: When check box is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist.

In the **Products and Color cards checklist** page, you have the following options:



1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

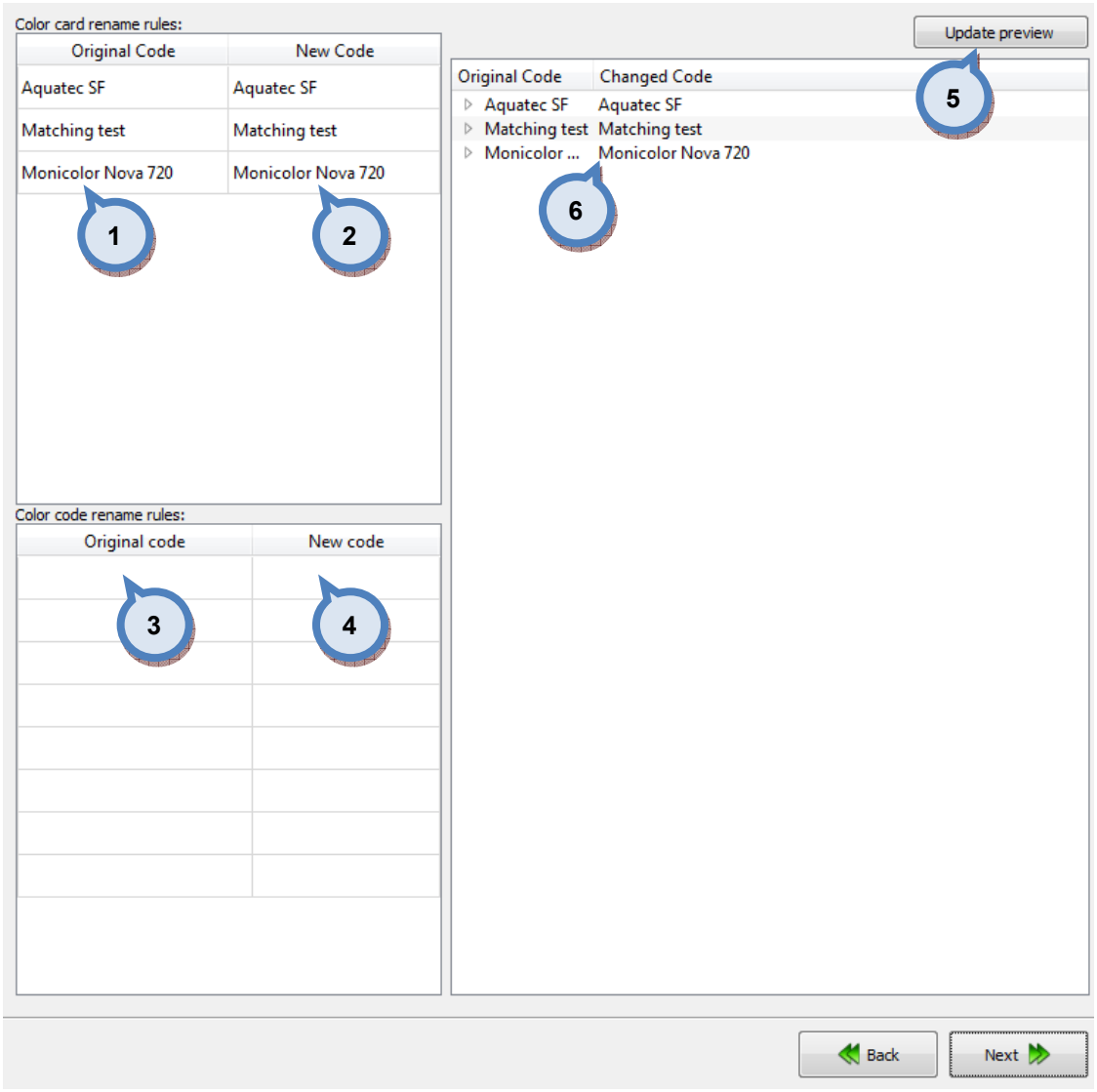
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

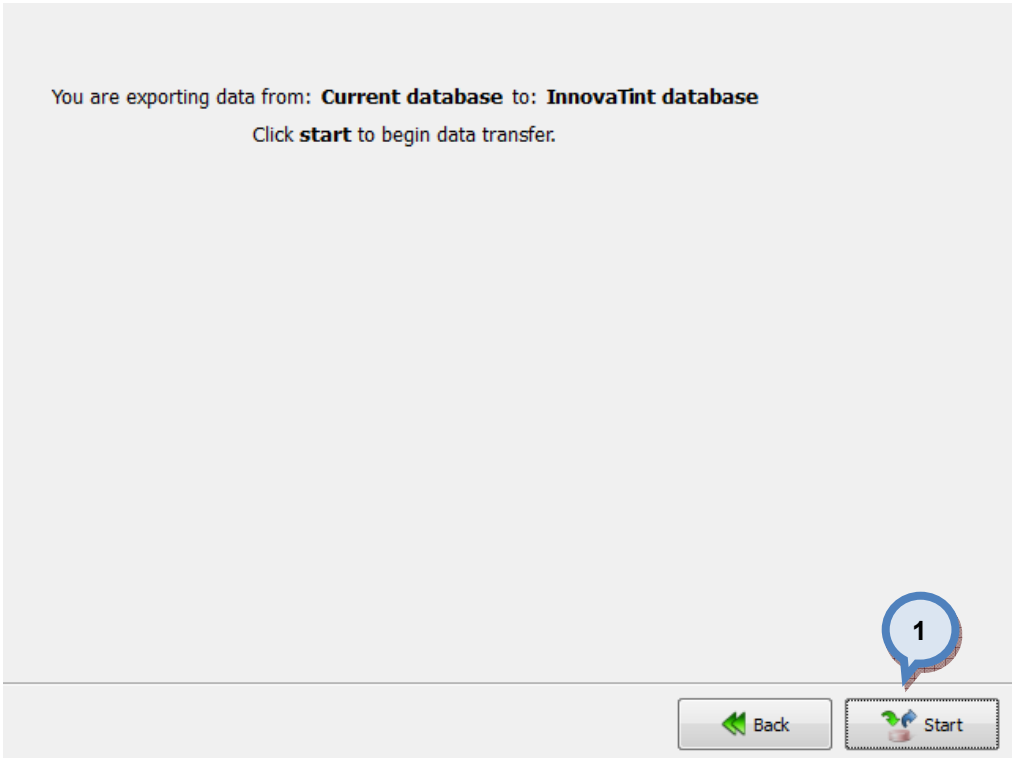
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

Next window in the export wizard is: **Start export**.

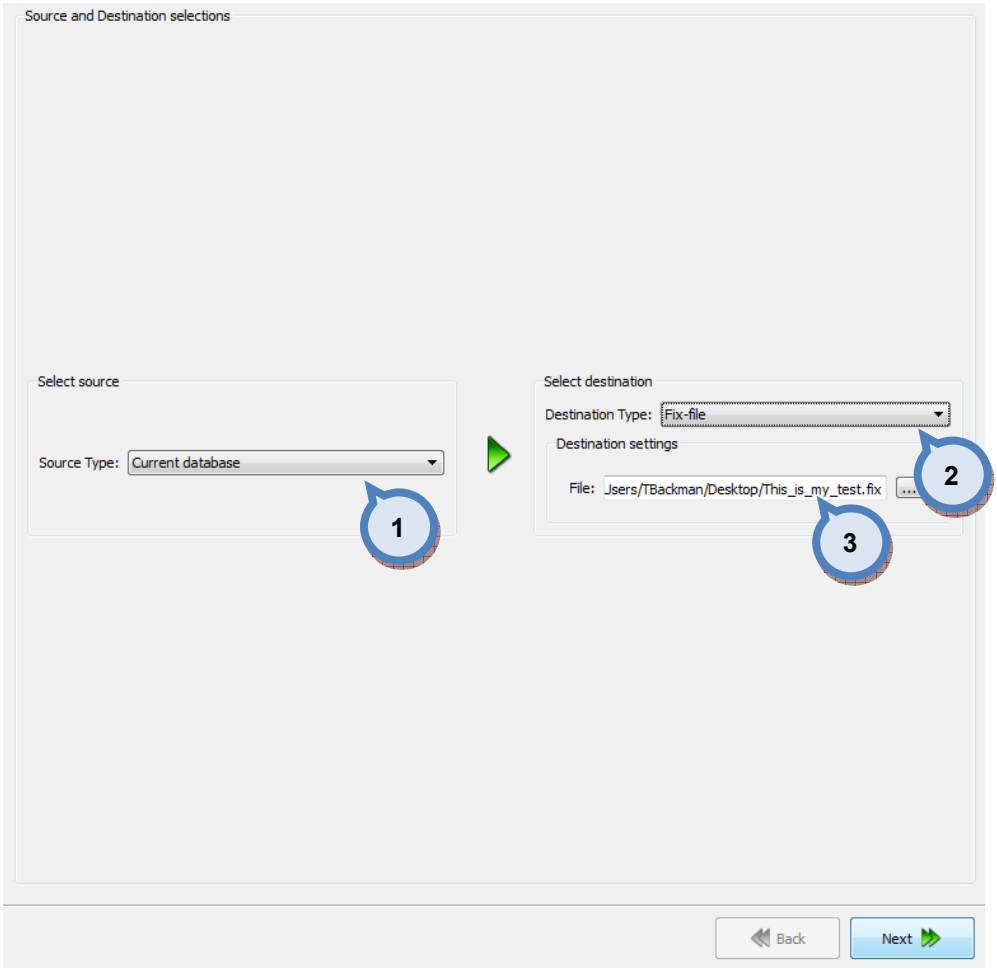
In the **Start export** page, you have the following options:



1.Start: The button to start the export process.

4.5.2 Export from the current database into the fix-file

When **current database** is selected as source type and **fix-file** is selected as destination type, the following options are available:



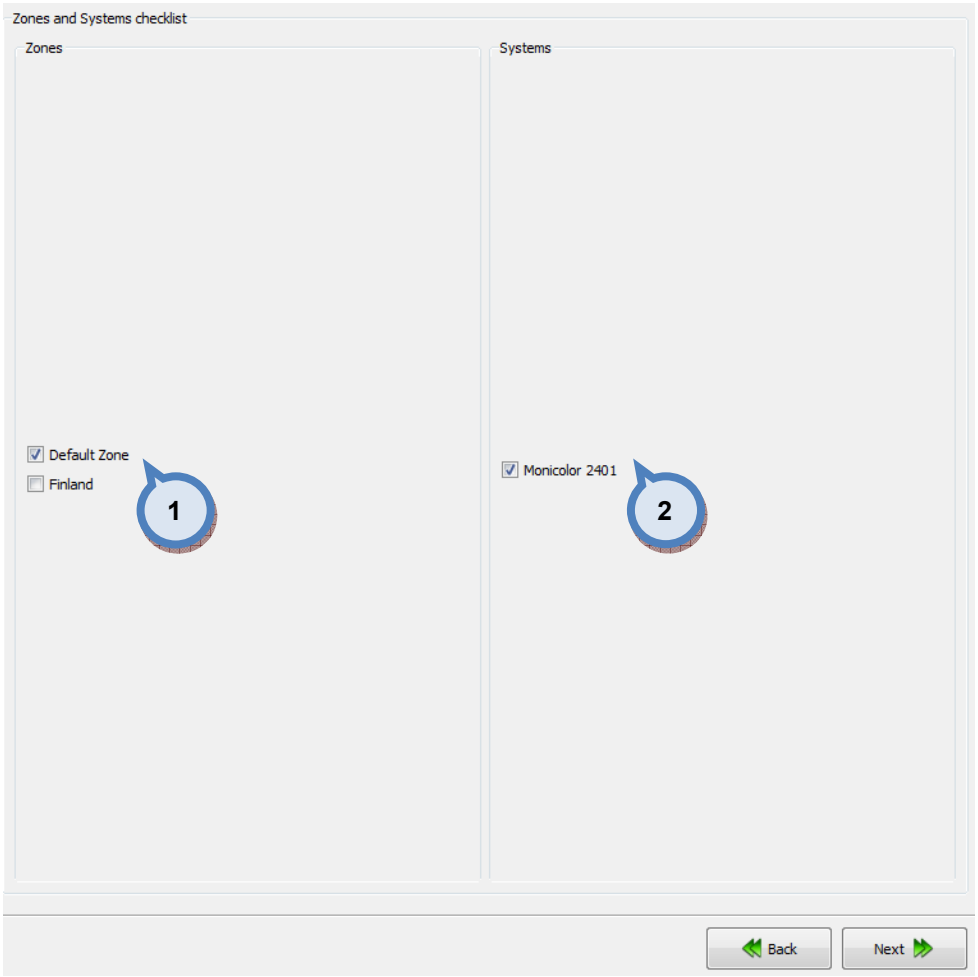
1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database type.

3.File: The text field to input the file name and the folder for the destination file. Use ... button to browse for a file.

Next window in the export wizard is: Zones and Systems checklist

In the **Zones and Systems checklist** page, you have the following options:



1.Zones: When check box is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist

In the **Products and color cards checklist** page, you have the following options:

1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When radio button is enabled, the corresponding product is included in to the export file.

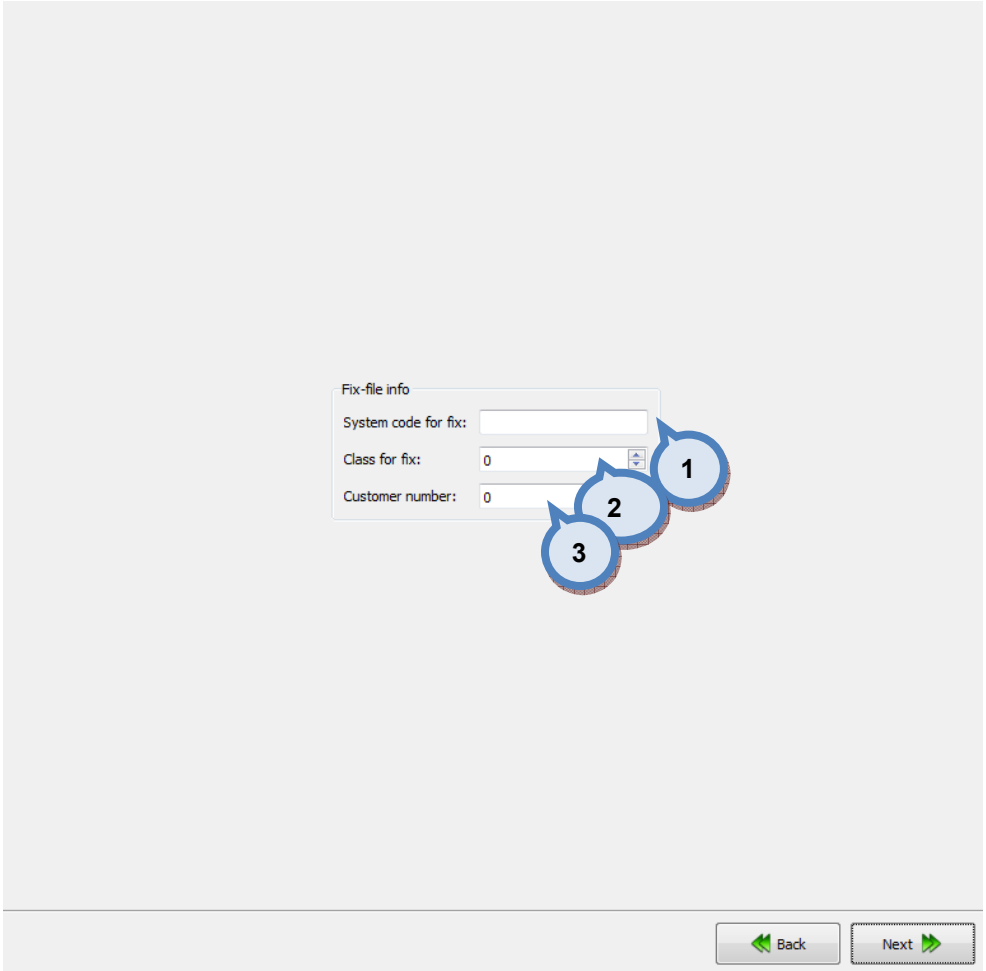
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file

Next window in the export wizard is: Fix file info

In the **Fix file info** page, you have the following options:



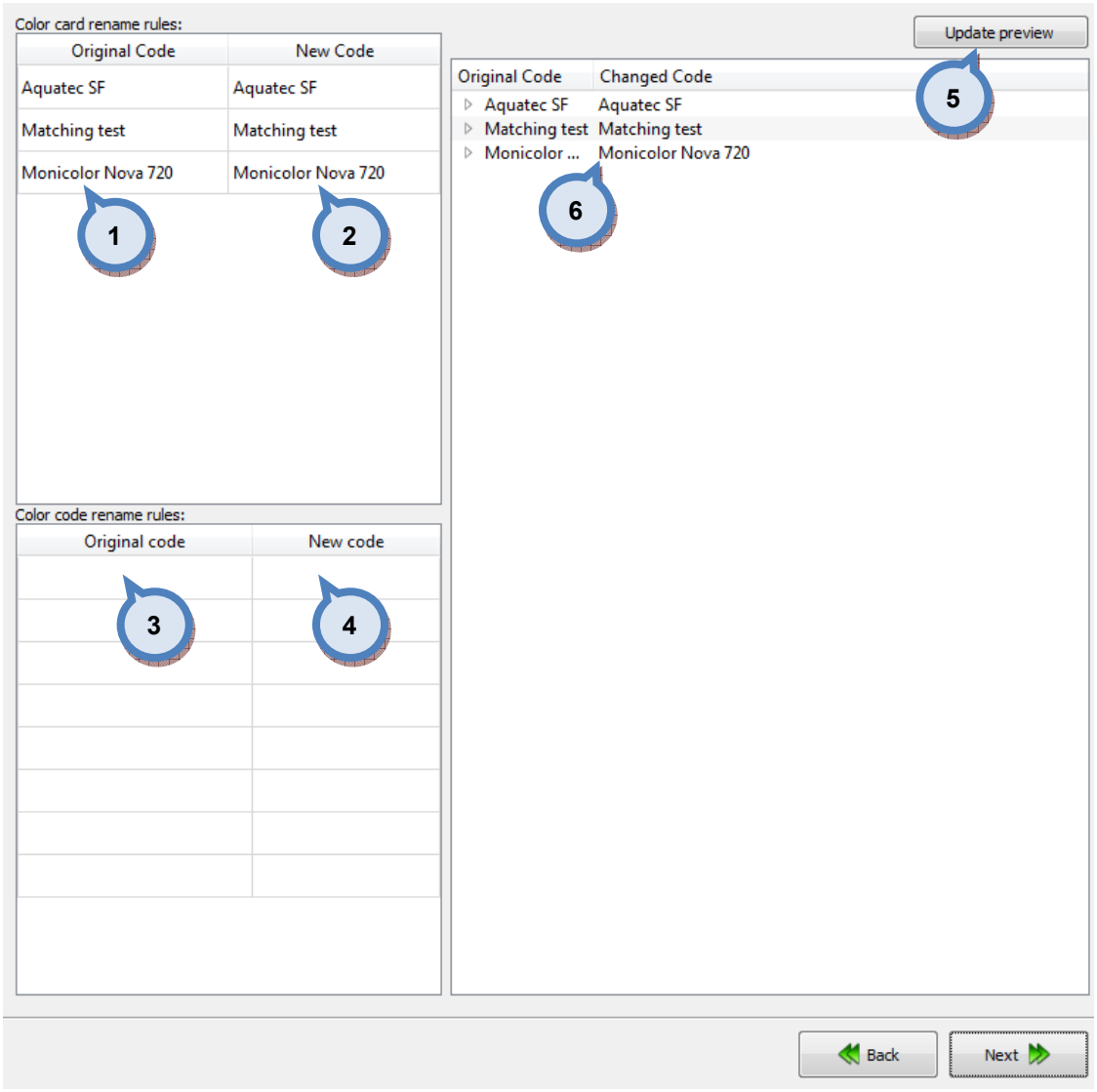
1.System code for fix: The text field to enter a system code for the fix file.

2.Class for fix: The selector field to select a class number for the formula exported into the fix file.

3.Customer number: The selector field to select a customer number for the formula exported into the fix file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

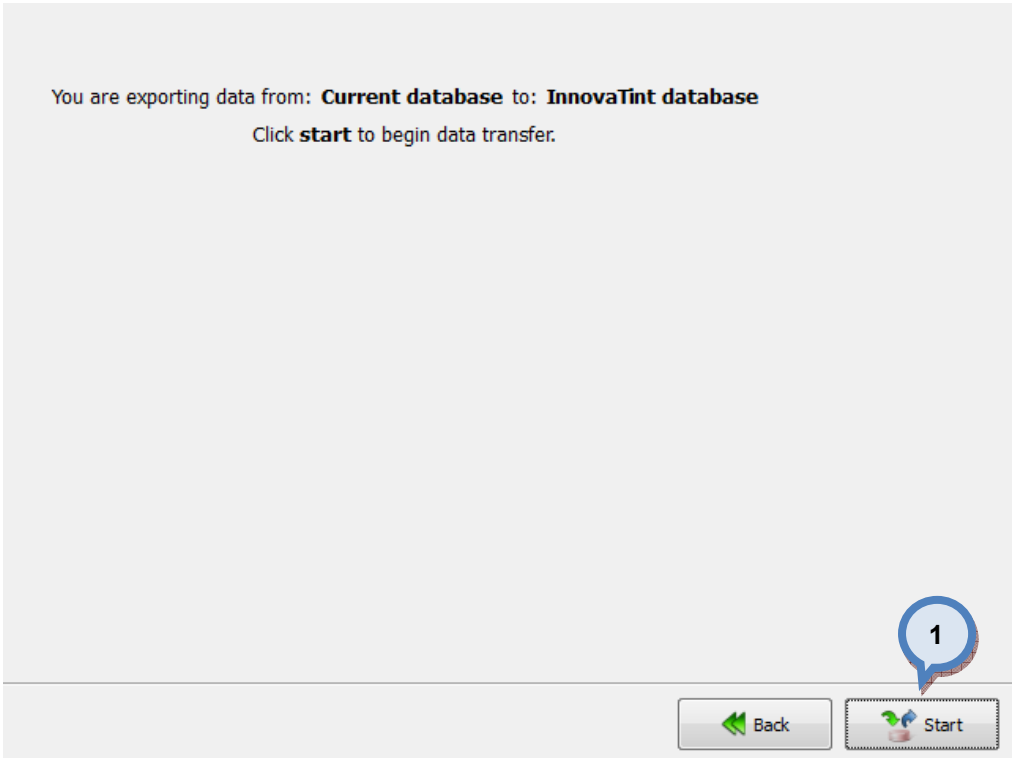
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

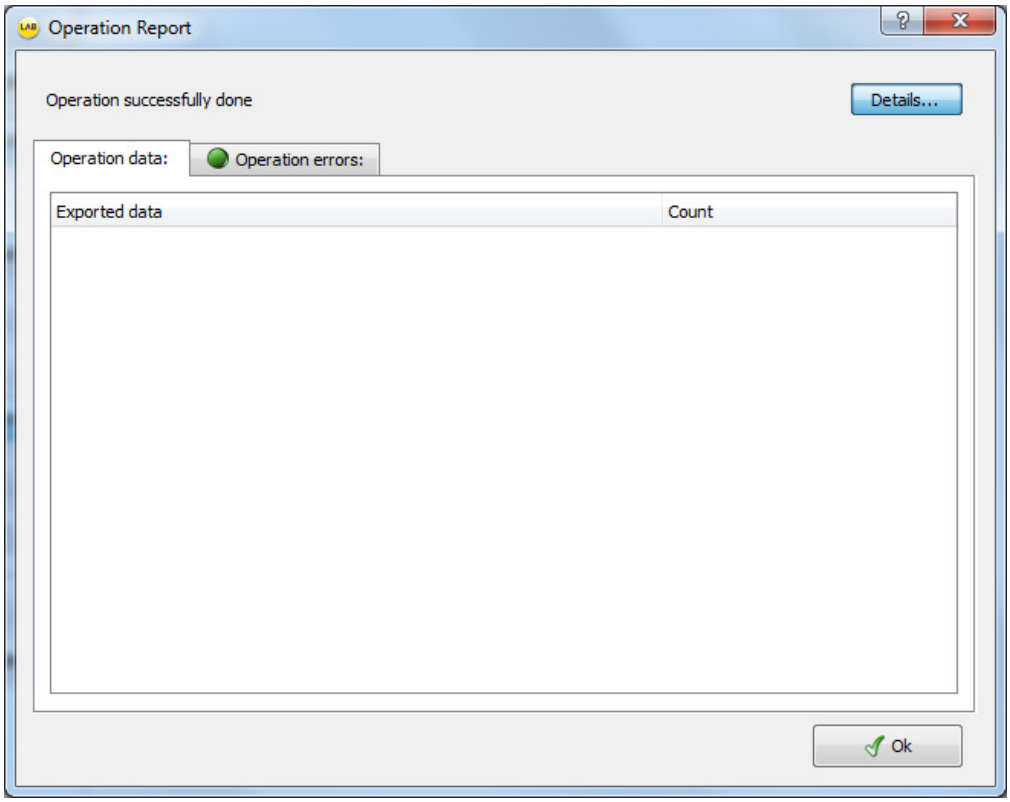
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:



1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.3 Export from the current database into the free text

When **current database** is selected as source type and **Free text** is selected as destination type, the following options are available:

1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database type.

3.File: The text field to input the file name and the folder for the destination file. Use ... button to browse for a file.

Next window in the export wizard is: Zones and Systems checklist selection

In the **Zones and Systems checklist** page, you have the following options:

1.Zones: When check box is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist

In the **Products and Color cards checklist** page, you have the following options:

1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

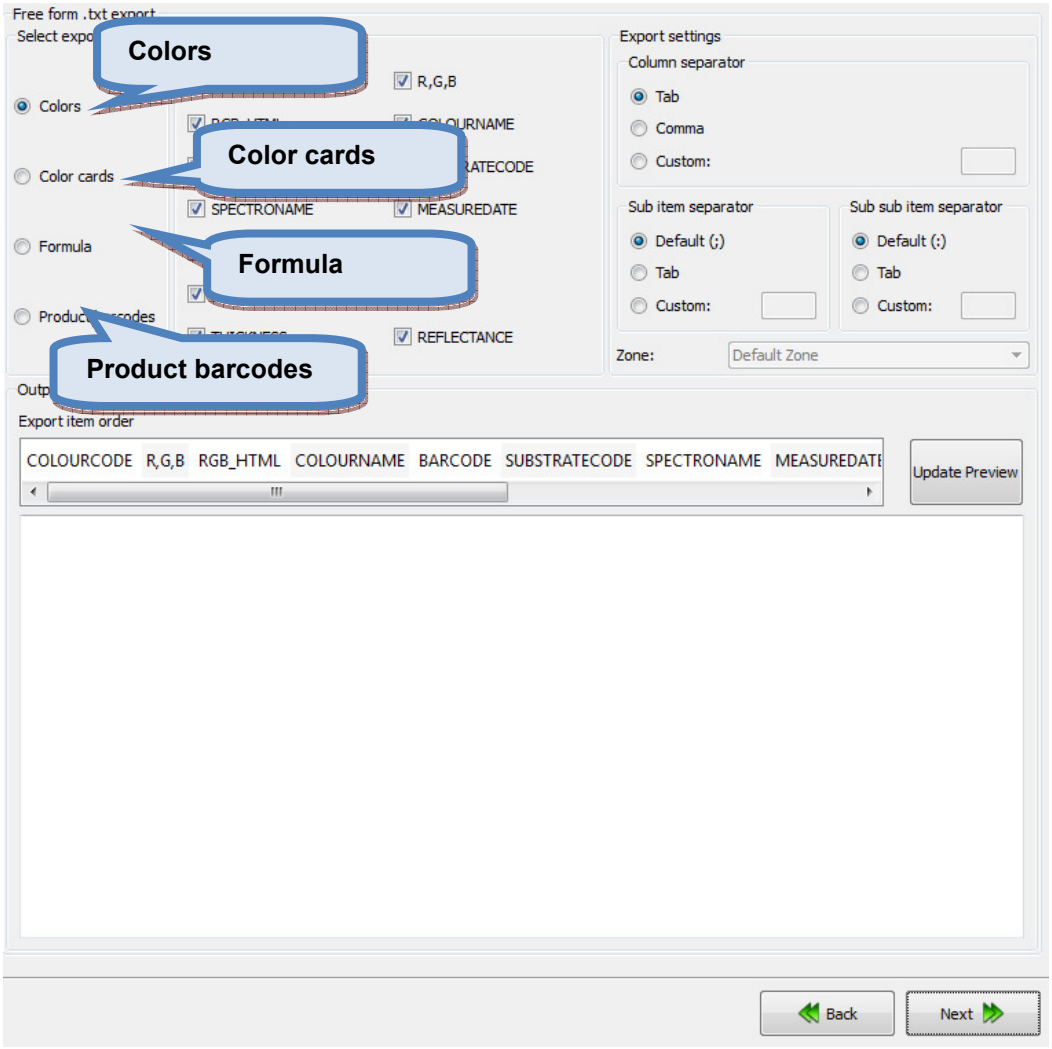
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

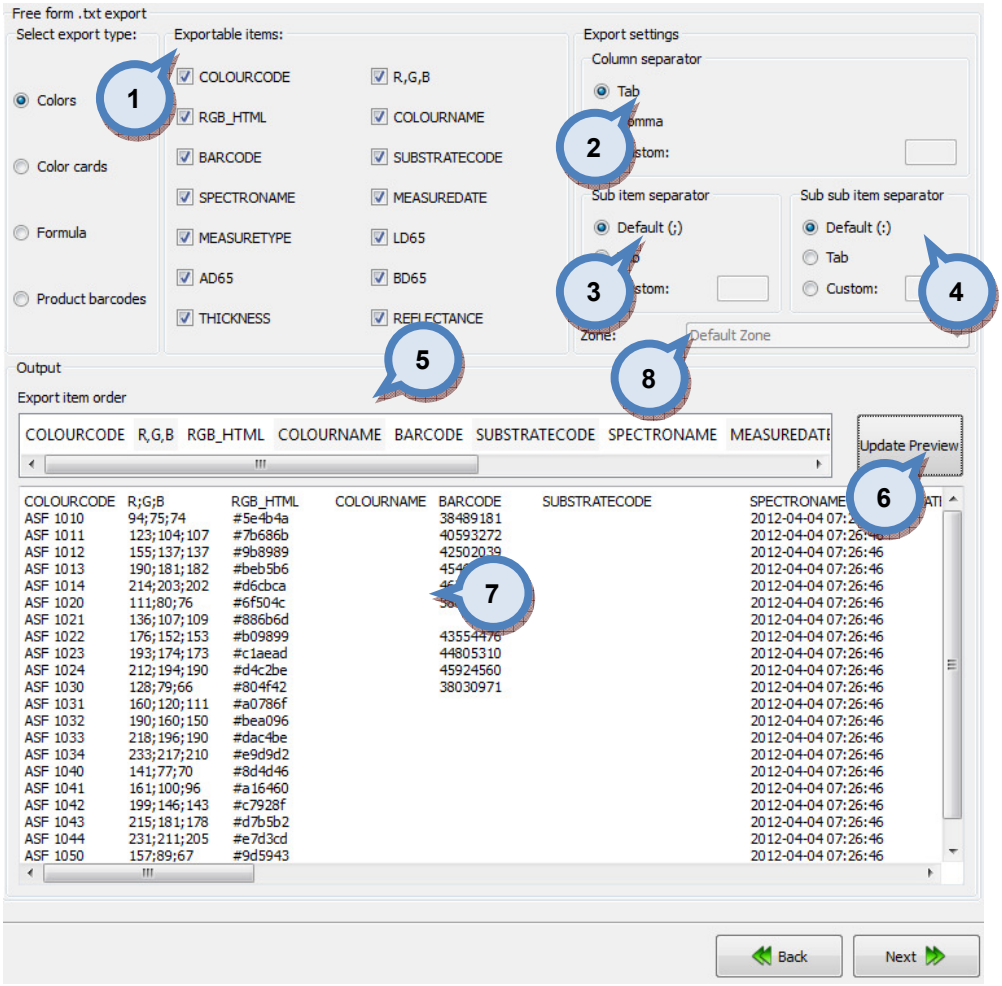
5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Free form .txt export.

In the **Free from .txt export** page, you have four export options: colors, color cards, formula, and product barcodes.



When **Colors** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

COLOURCODE: The name or code of the color

RGB_HTML: The RGB values of the color in the HTML format

BARCODE: The bar code of the color.

SPECTRONAME: The name of the spectrophotometer

MEASURETYPE: The measurement type. See measurement type options below.

AD65: The a* component of the color values when using D65 light source.

THICKNESS: The thickness of the draw down used in the measurements.

R,G,B: The colour values with R, G, B units.

COLOURNAME: The name of the colour.

SUBSTRATECODE: The substrate code.

MEASUREDATE: The date of the measurement.

LD65: The L* component of the color values when using D65 light source.

BD65: The b* component of the color values when using D65 light source.

REFLECTANCE: The reflectance values.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

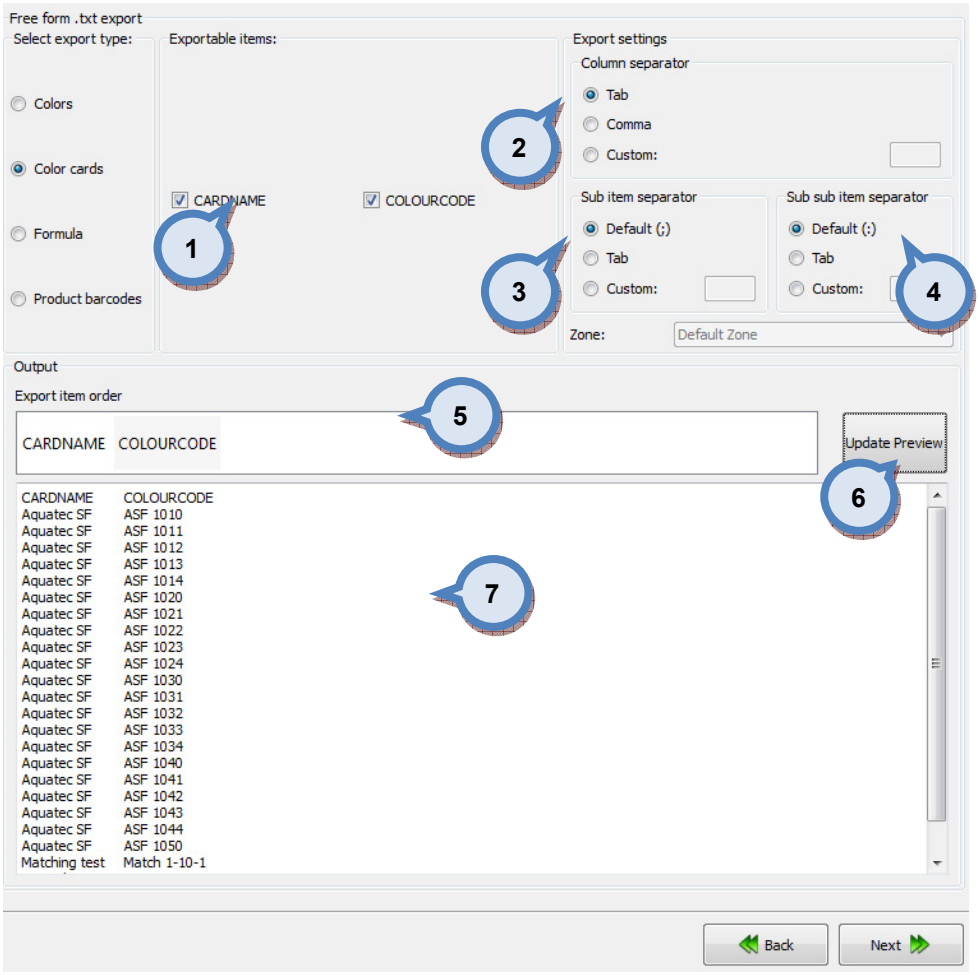
6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

8.ZONE: Dropdown list to select zone

Next window in the export wizard is: Color card renaming

When **Color cards** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

CARDNAME: The name or code of the color card.

COLOURCODE: The name or code of the color.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

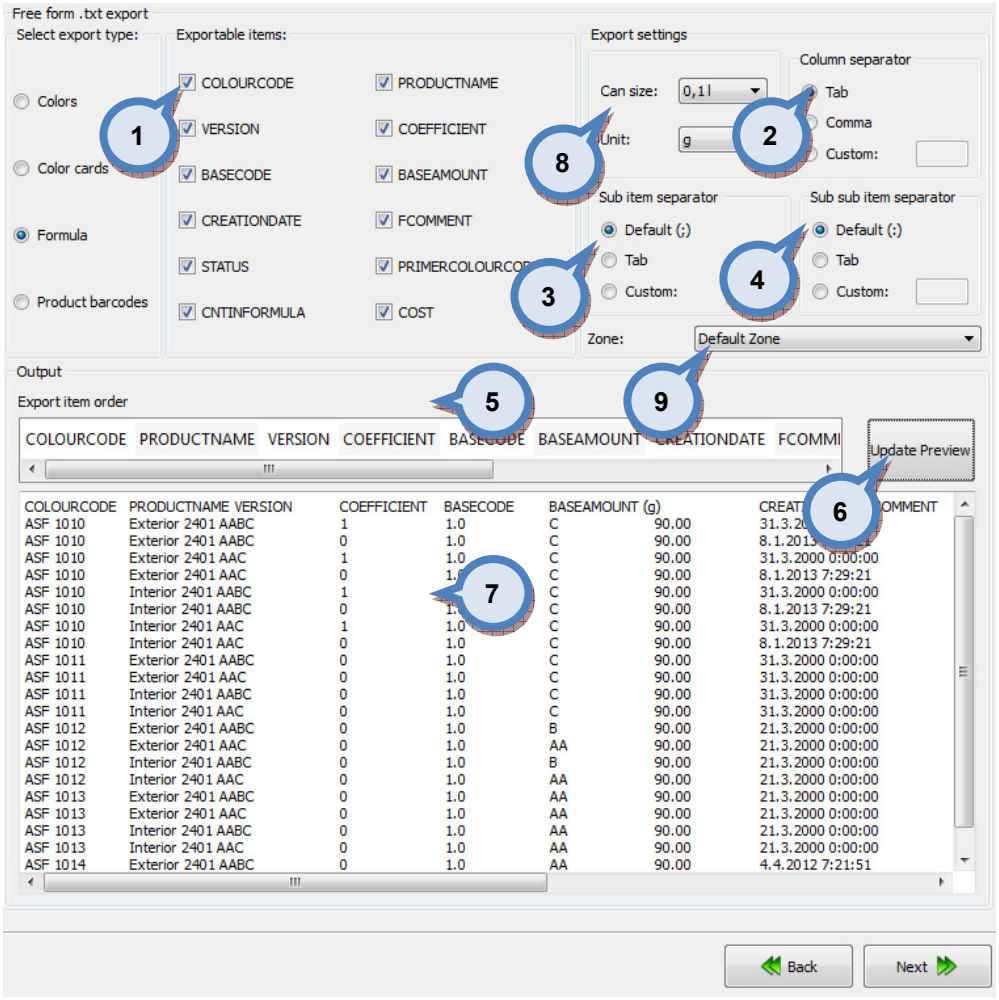
5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

Next window in the export wizard is: Color card renaming.

When **Formula** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

COLOURCODE: The color code.

VERSION: The version number or name of the formula.

BASECODE: The base code.

CREATIONDATE: The formula creation date.

STATUS: The formula status.

CNTINFORMULA: The component (the colorant or the base paint) in the formula.

PRODUDUCTNAME: The product name.

COEFFICIENT: The number used to multiply the formula.

BASEAMOUNT: The base amount in the formula.

FCOMMENT: The formula comment.

PRIMERCOLORCODE: The code of the primer color.

COST: Cost of the formula.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

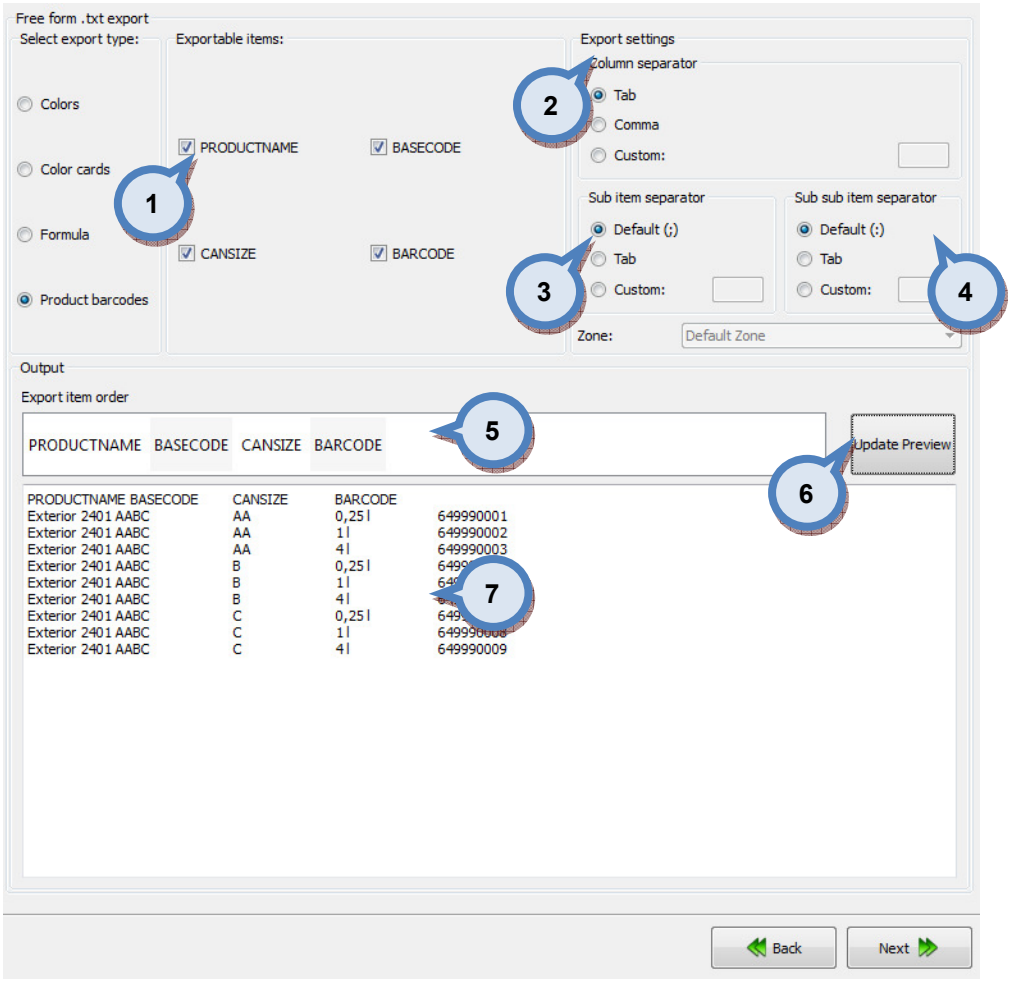
7.OUTPUT: The preview window of the exported data.

8.CANSIZE and UNIT: Dropdown list to select output format.

9.ZONE: Dropdown list to select zone.

Next window in the export wizard is: Color card renaming.

When **Product barcodes** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

PRODUCTNAME: The product name.

CANSIZE: The can size.

CASECODE: The base paint code.

CARCODE: The bar code.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

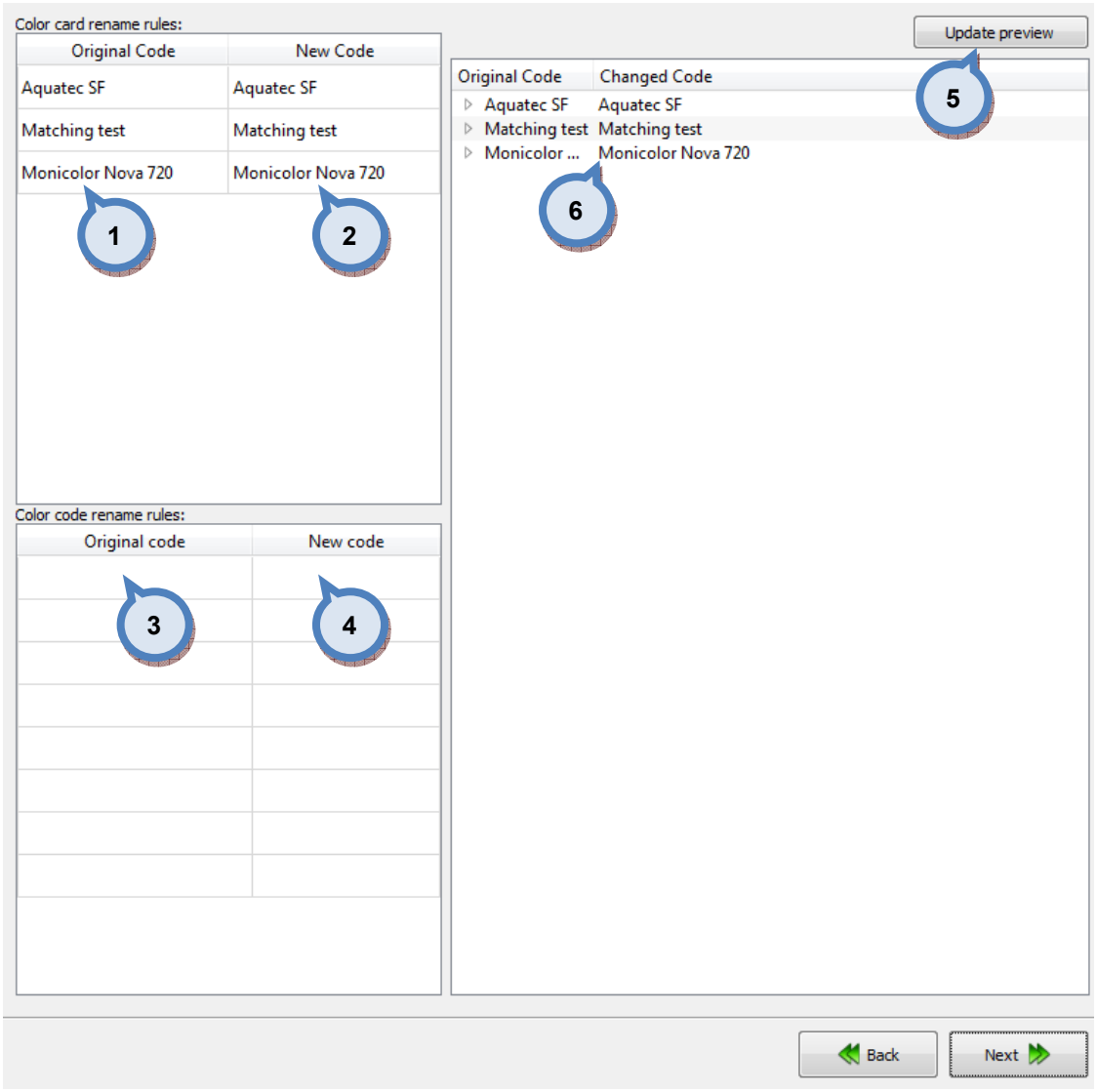
5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

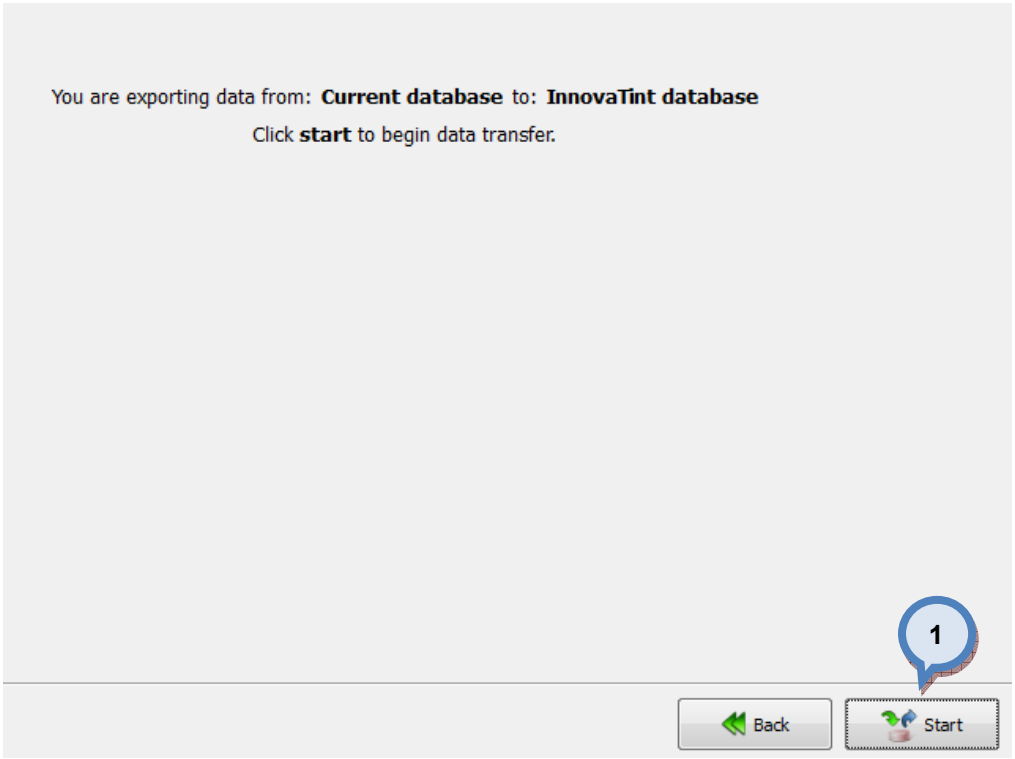
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

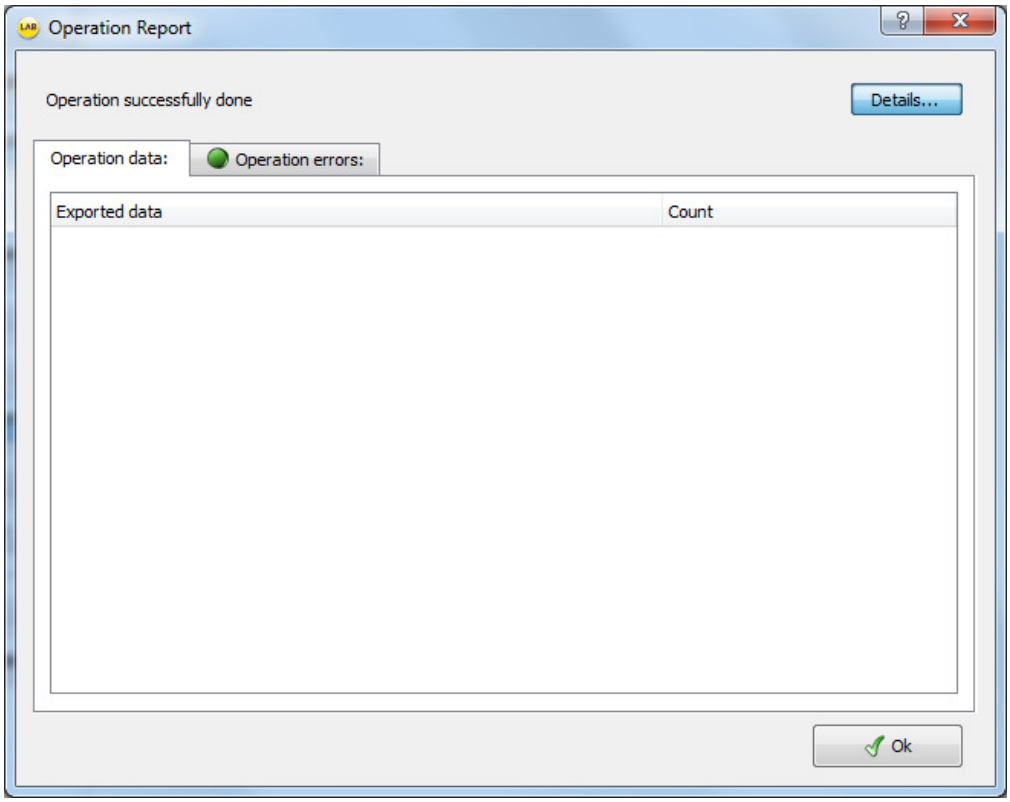
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:



1.Start: The button to start the export process.

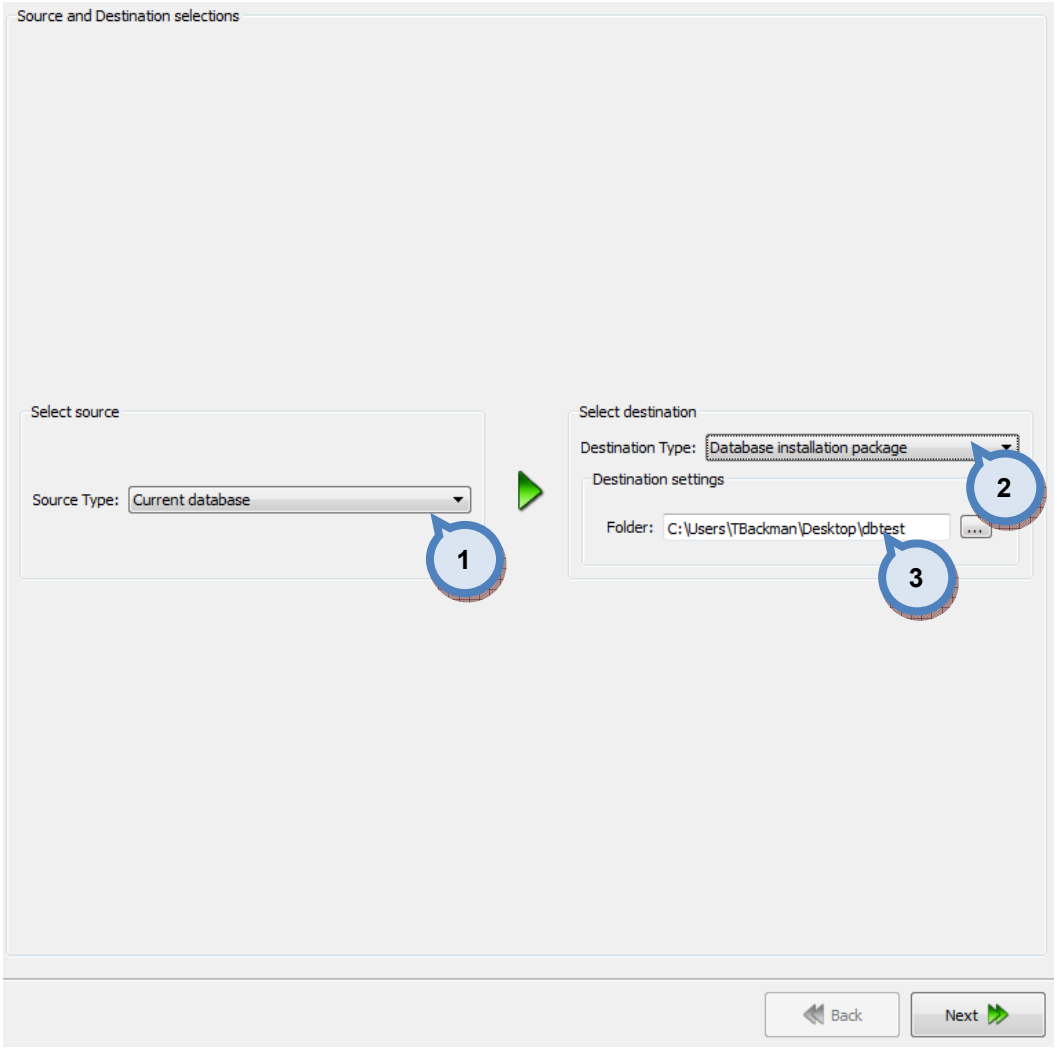
When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.4 Export from the current database into the database installation package

The database installation package is can only be used with the LAB software version.

When **current database** is selected as source type and **Database installation package** is selected as destination type, the following options are available:



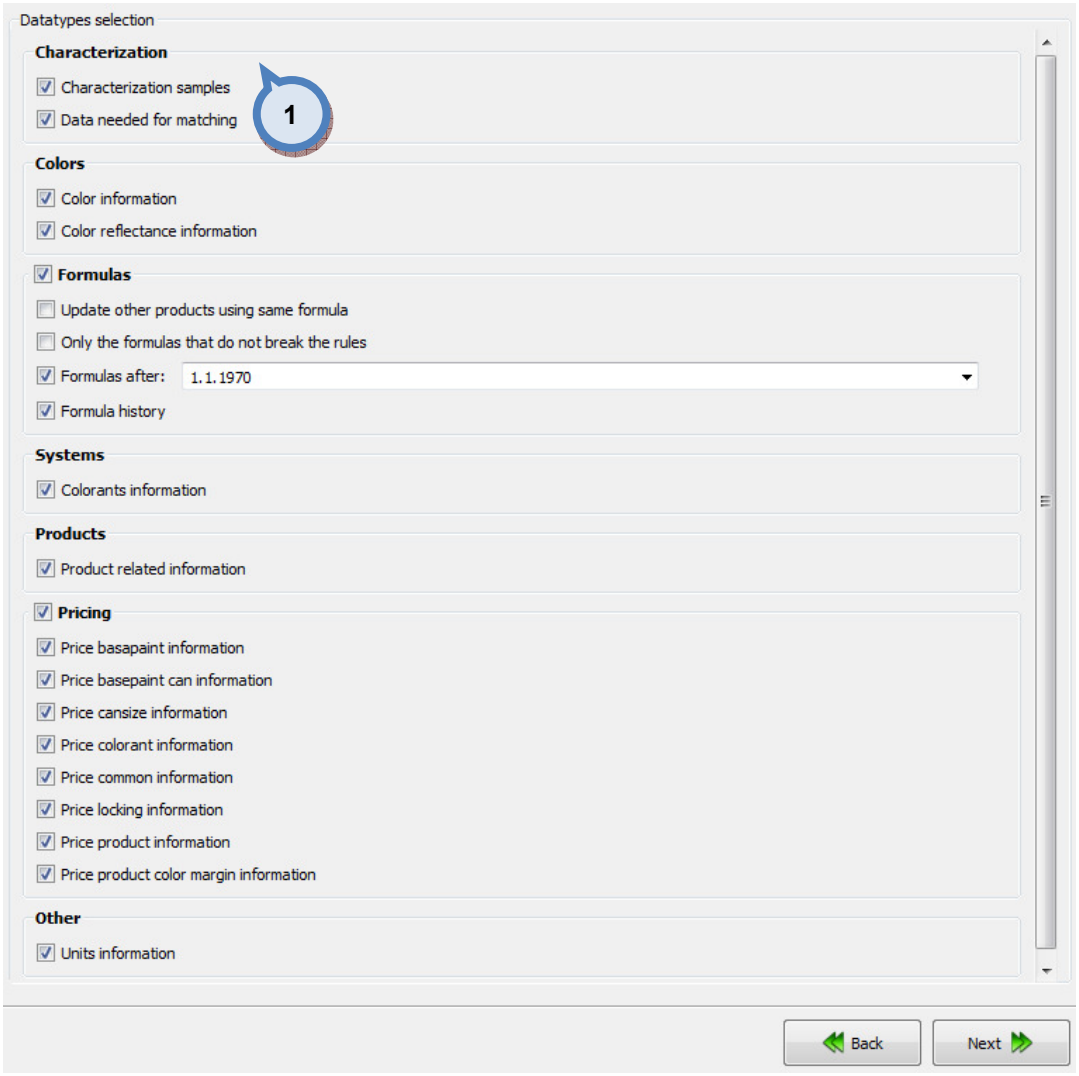
1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database type.

3.Folder: The text field to input the folder for the destination file. Use ... button to browse for a folder.

Next window in the export wizard is: Datatypes selection

In the **Datatypes selection** page, you have the following options:



1.When check boxes are enabled, the corresponding information is included in to the export file.

Characterizations

- **Characterization samples**
- **Data needed for matching:** When this option is selected, also Colorants information as well as the Color reflectance information has to be included.

Colors

- **Color information**
- **Color reflectance information**

Formulas

- **Update other products using same formula**
- **Only the formulas that do not break the rules**
- **Formulas after:** The text field to type in the date of the oldest possible formula included in to the export file.
- **Formula history**

Systems

- **Colorants information**

Products

- **Product related information**

Pricing

- **Price basepaint information**
- **Price basepaint can information**
- **Price cansize information**
- **Price colorant information**
- **Price common information**
- **Price locking information**
- **Price product information**
- **Price product color margin information**

Other

- **Units information**

Next window in the export wizard is: Zones and Systems checklist

In the **Zones and Systems checklist** page, you have the following options:

1.Zones: When check box is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist.

In the **Products and Color cards checklist** page, you have the following options:

1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

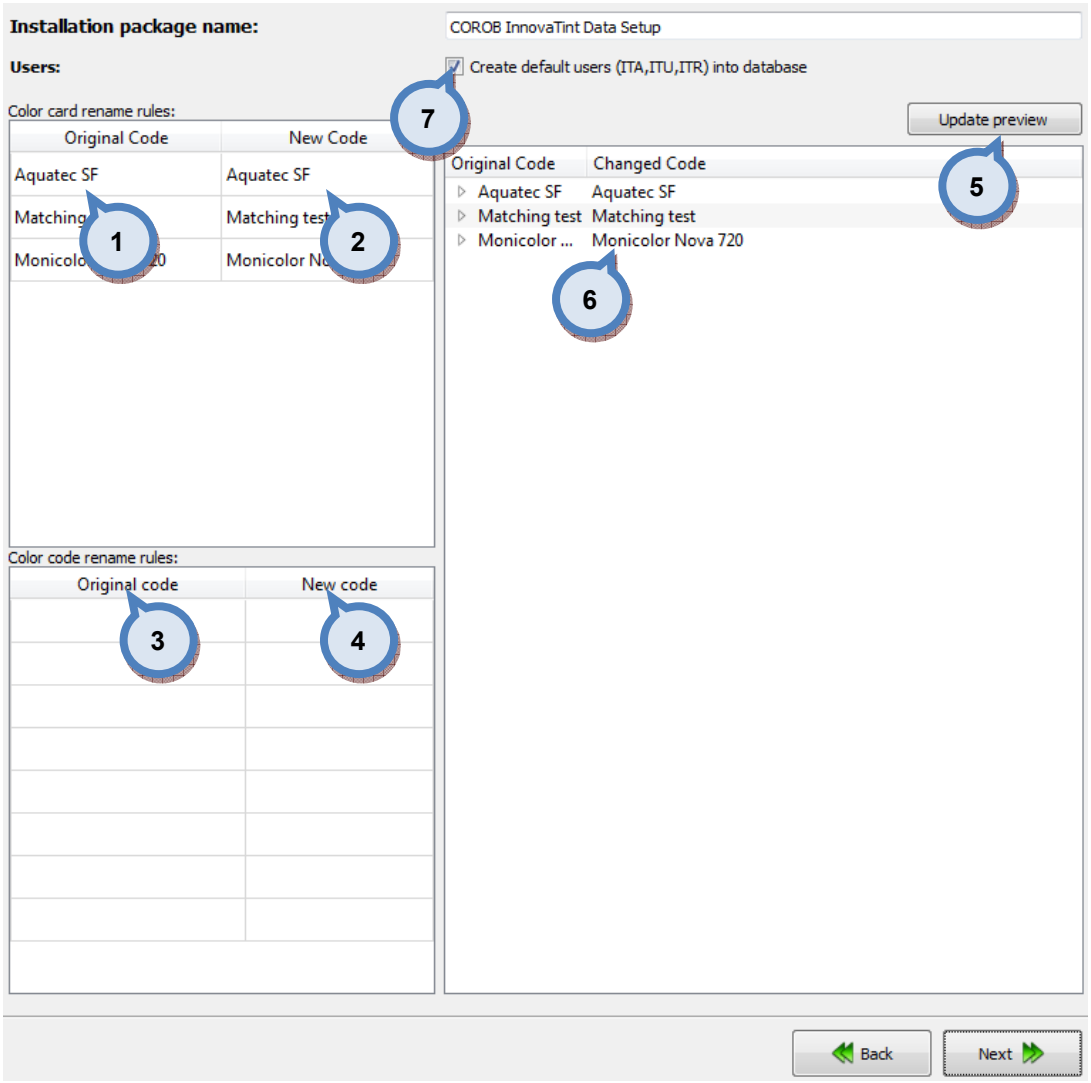
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

4.New code: New prefix

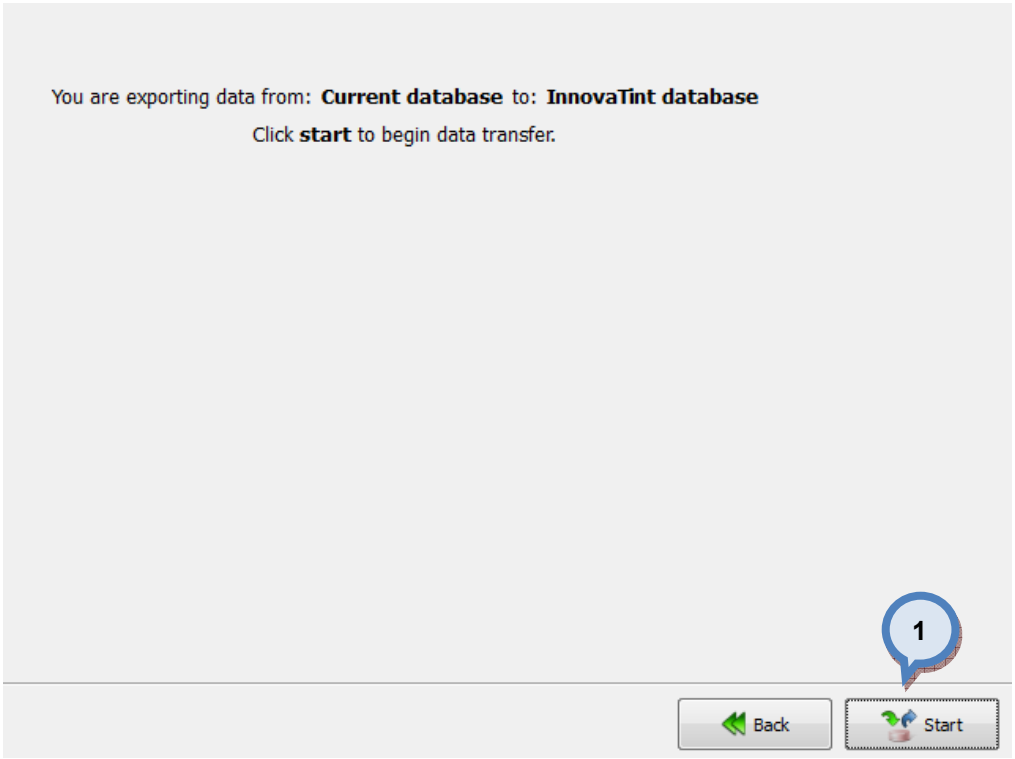
5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

7. Create default users (ITA, ITU, ITR) into database: When the checkbox is enabled default user information is created to the database.

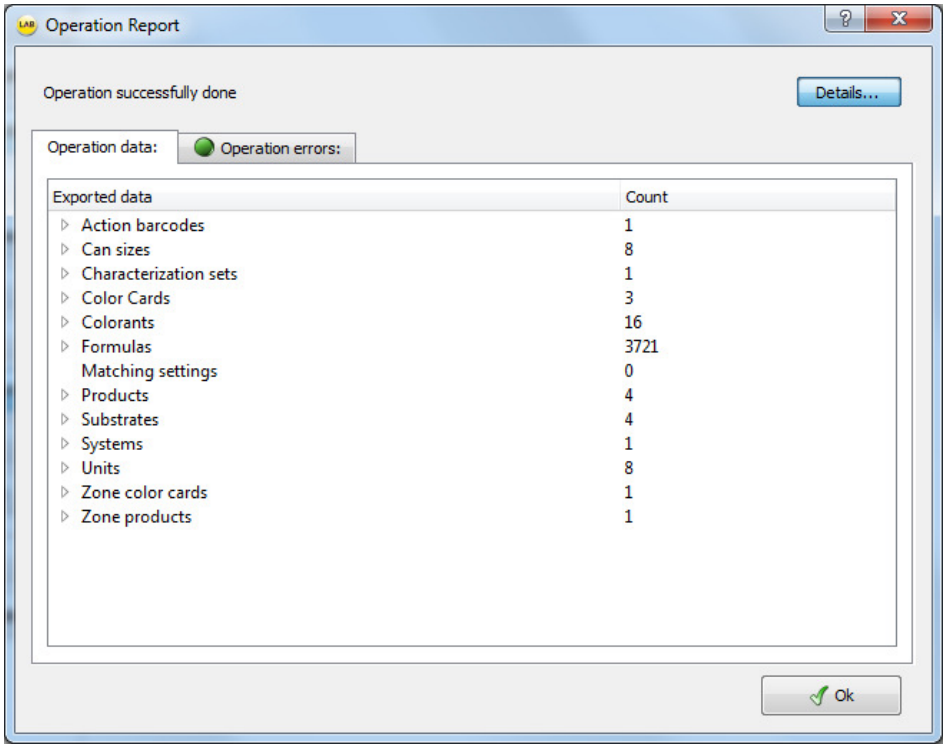
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:



1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.5 Export from the current database into the shop database installation package

When **current database** is selected as source type and **Shop database installation package** is selected as destination type, the following options are available:

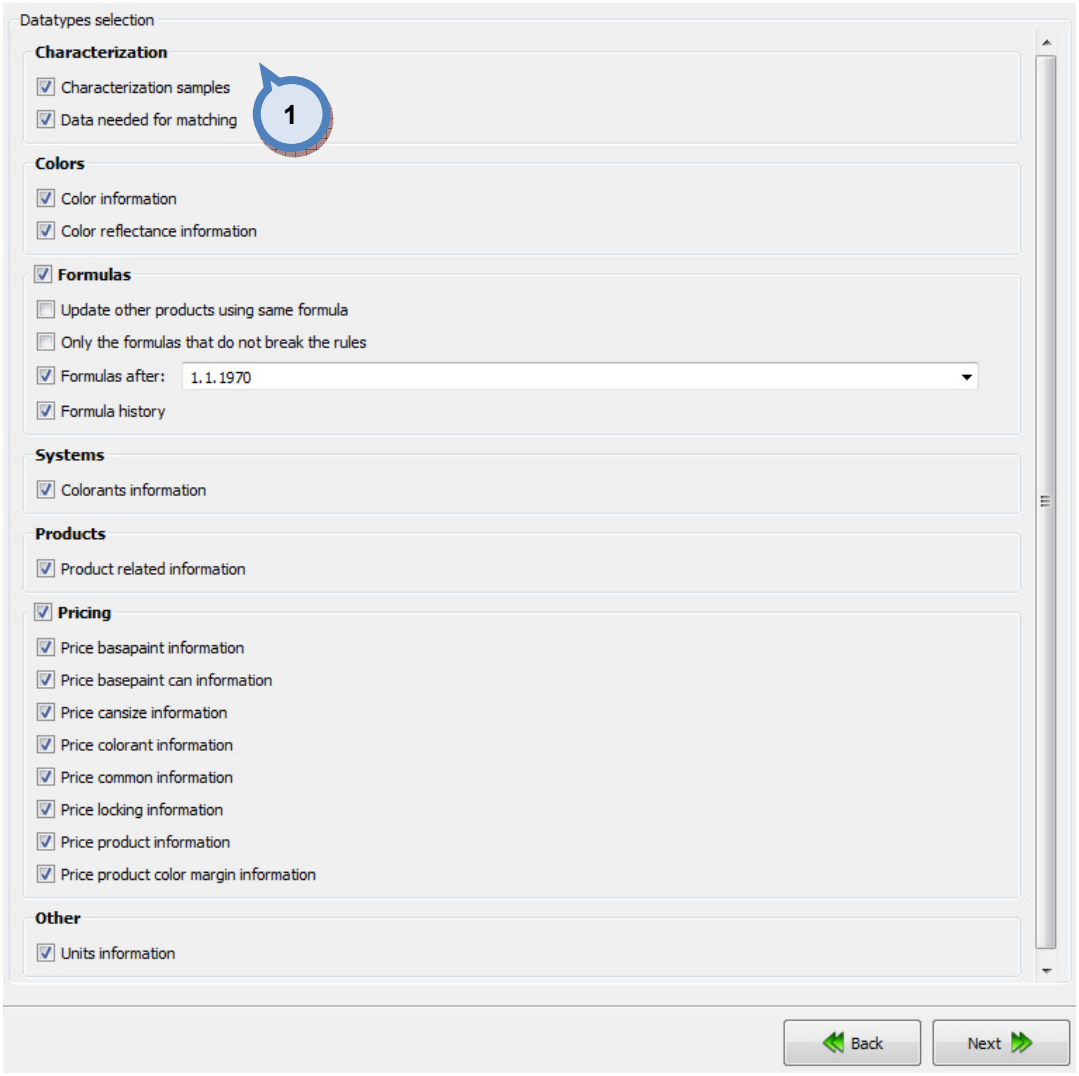
1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database type.

3.Folder: The text field to input the file name and the folder for the destination file. Use button to browse for a folder.

Next window in the export wizard is: Datatypes selection.

In the **Datatypes selection** page, you have the following options:



1.When check boxes are enabled, the corresponding information is included in to the export file.

Characterizations

- **Characterization samples**
- **Data needed for matching:** When this option is selected, also Colorants information as well as the Color reflectance information has to be included.

Colors

- **Color information**
- **Color reflectance information**

Formulas

- **Update other products using same formula**
- **Only the formulas that do not break the rules**
- **Formulas after:** The text field to type in the date of the oldest possible formula included in to the export file.
- **Formula history**

Systems

- **Colorants information**

Products

- **Product related information**

Pricing

- **Price basepaint information**
- **Price basepaint can information**
- **Price cansize information**
- **Price colorant information**
- **Price common information**
- **Price locking information**
- **Price product information**
- **Price product color margin information**

Other

- **Units information**

Next window in the export wizard is: Zones and Systems checklist

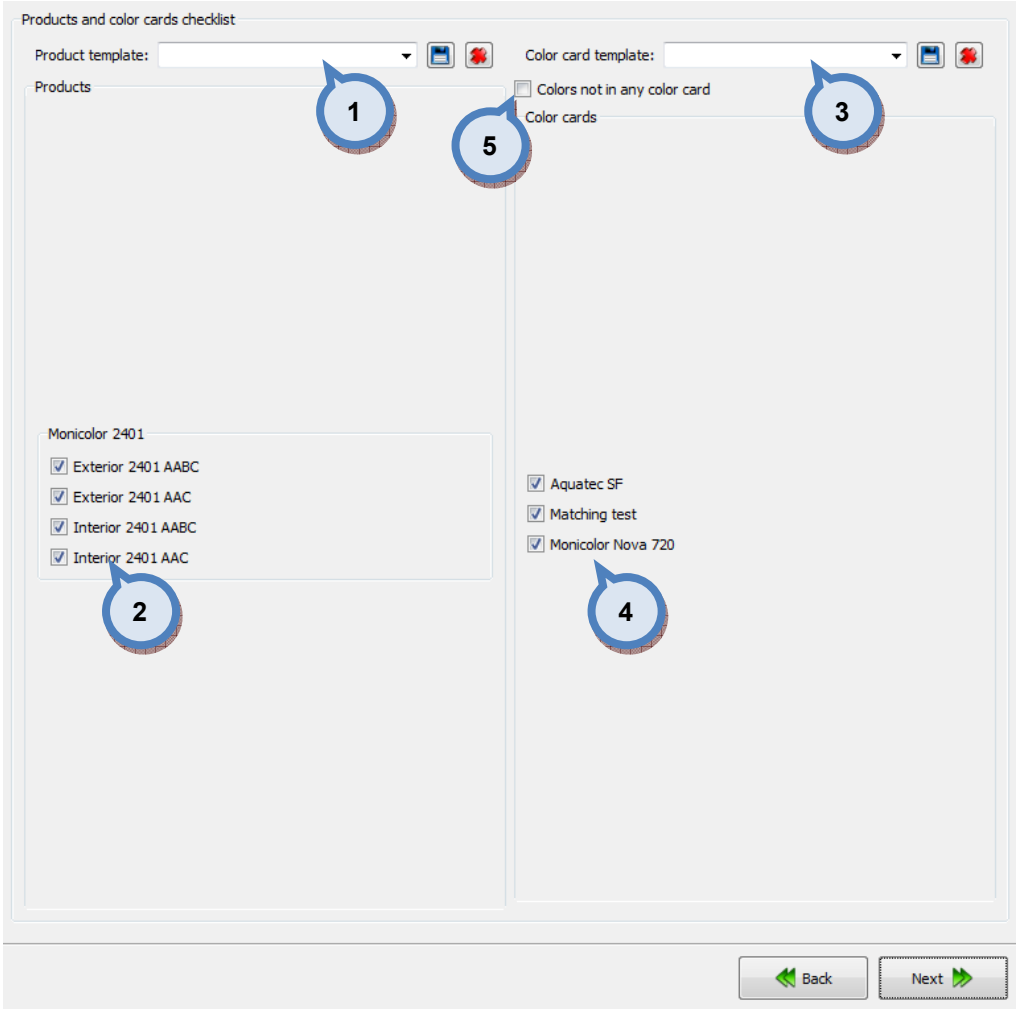
In the **Zones and Systems checklist** page, you have the following options:

1.Zones: When radio button is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist

In the **Products and Color cards checklist** page, you have the following options:



1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

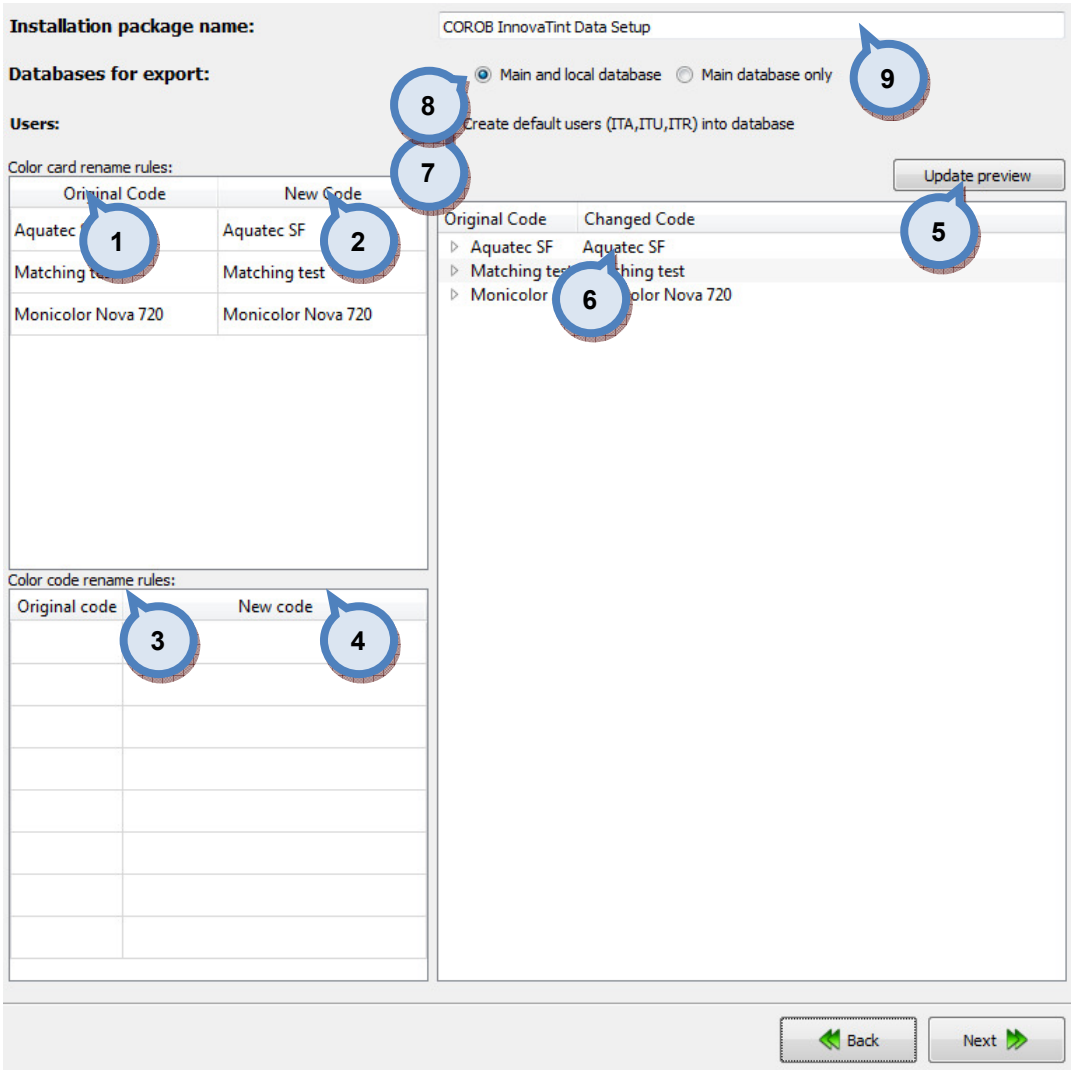
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

7.Create default users (ITA, ITU, ITR) into database: When the checkbox is enabled default user information is created to the database.

8.Databases for export: Radio buttons to select type of installer package, options are:

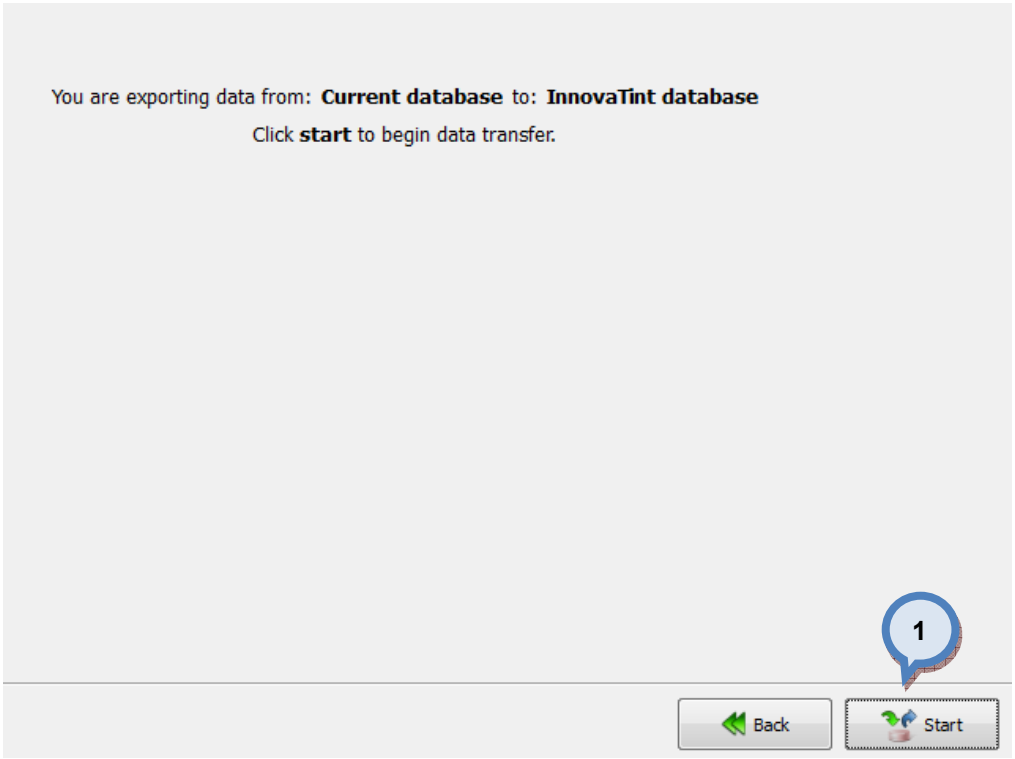
- Main and local database; usually for the new installations

- Main database only; usually cases where shop keeper has collected customer information and do not want to lose that information. Local database is empty, and by installing it all data is lost.

9.Installation package name: Text field to change the name of exported installation package.

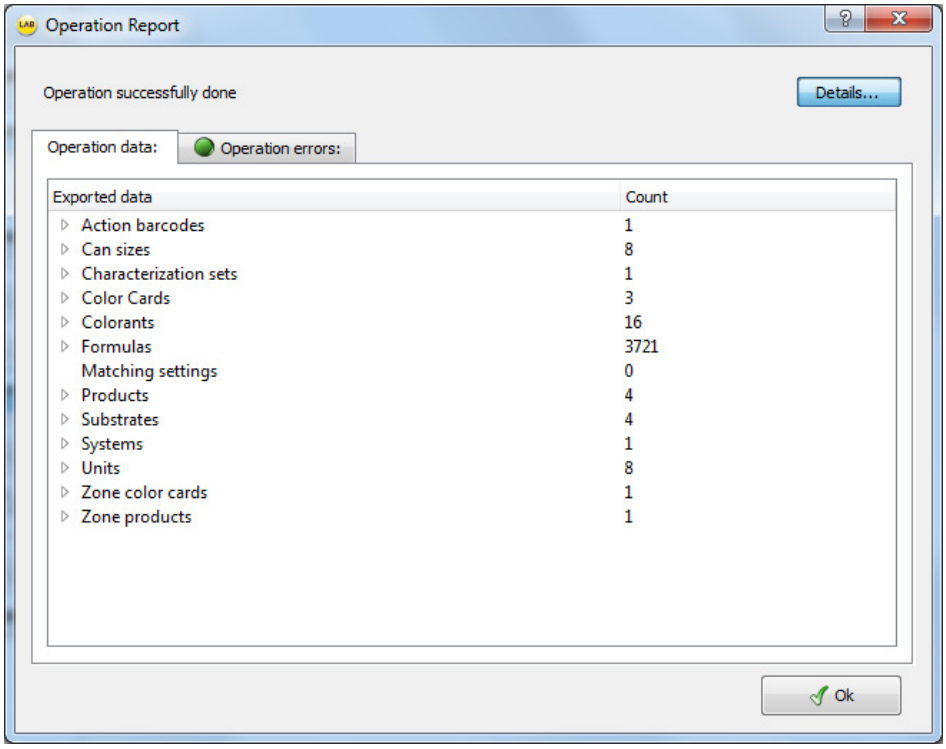
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:



1.Start: The button to start the export process.

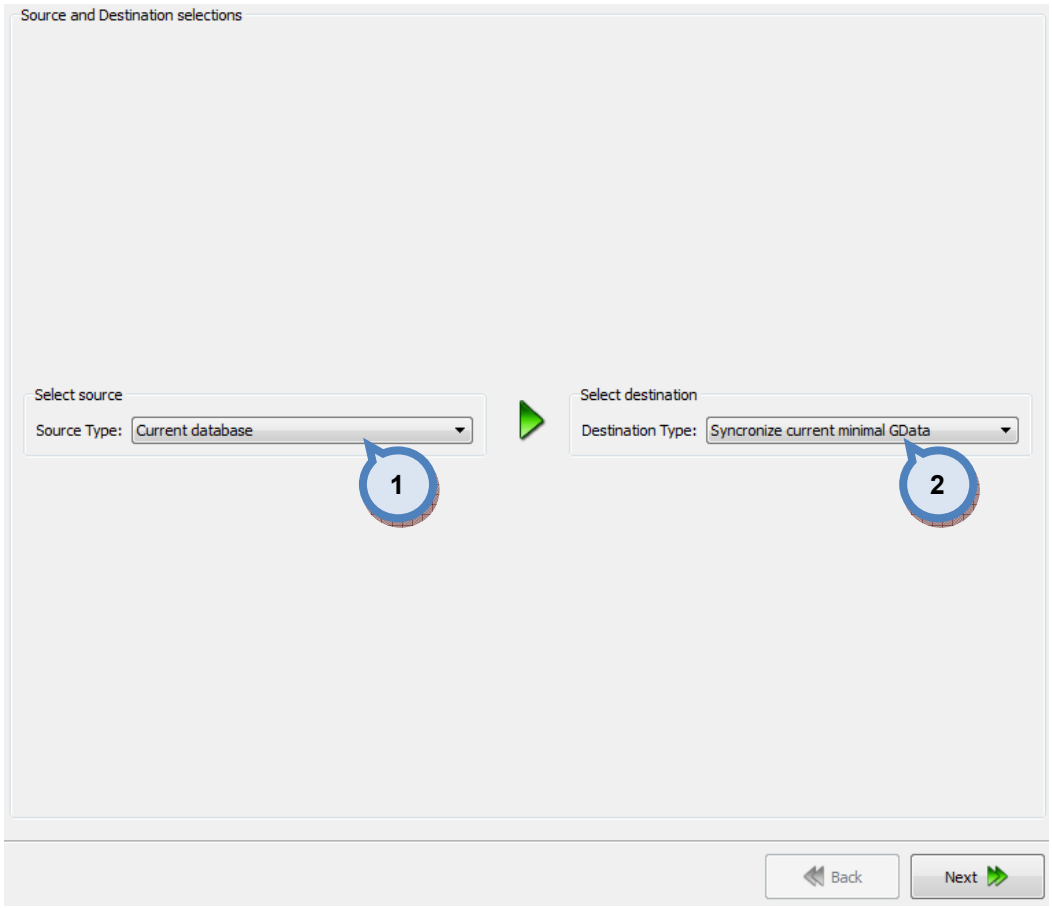
When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.6 Synchronize from the current database into the minimal Gdata

This function will create a minimal Gdata package to be used with the CorobTech-program and the Corob tinting equipment.

When **current database** is selected as source type and **Synchronize current minimal Gdata** is selected as destination type, the following options are available:

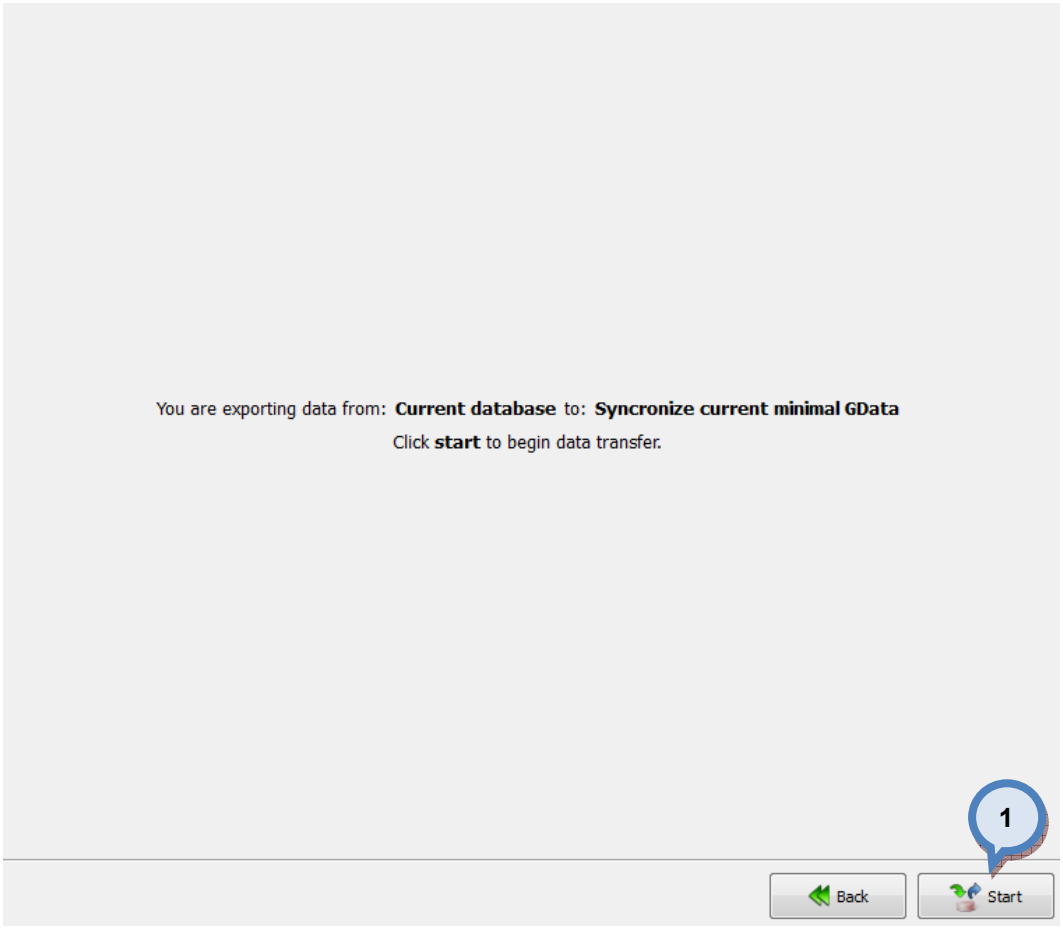


1.Source type: The drop down list to select a source database type.

2.Destination type: The drop down list to select a destination database type.

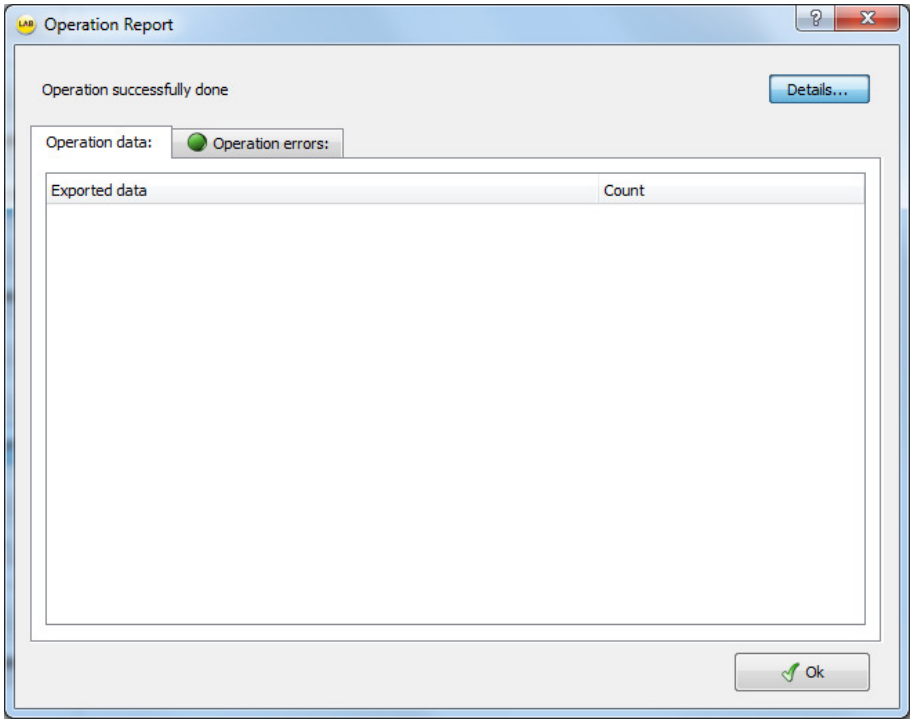
Next window in the export wizard is: Start export.

In the **Start export** page, you have the following options:



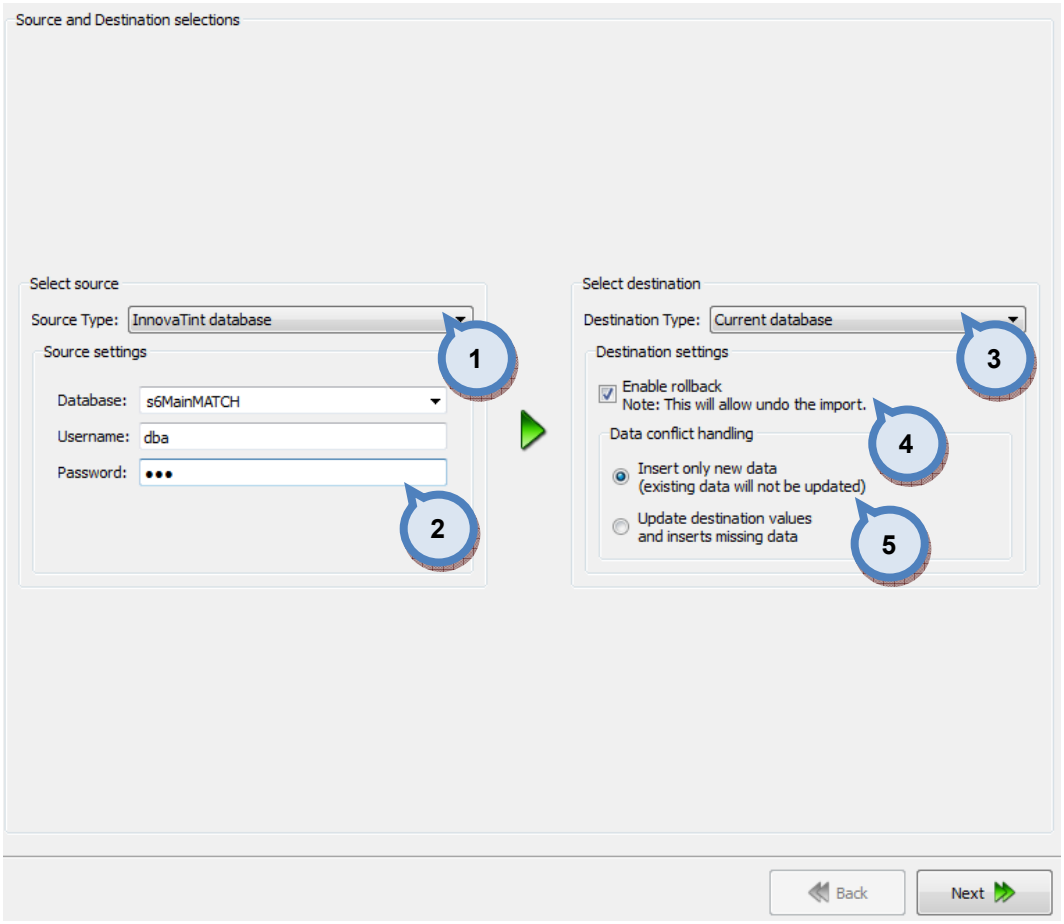
1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.7 Export from the Innovatint database into the current database

When **Innovatint database** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Source type: The drop down list to select a source database type.

2.Source settings: The database and user information selectors:

Database: The drop down menu to select a source database.

Username: The text field to enter a user name.

Password: The text field to enter a password.

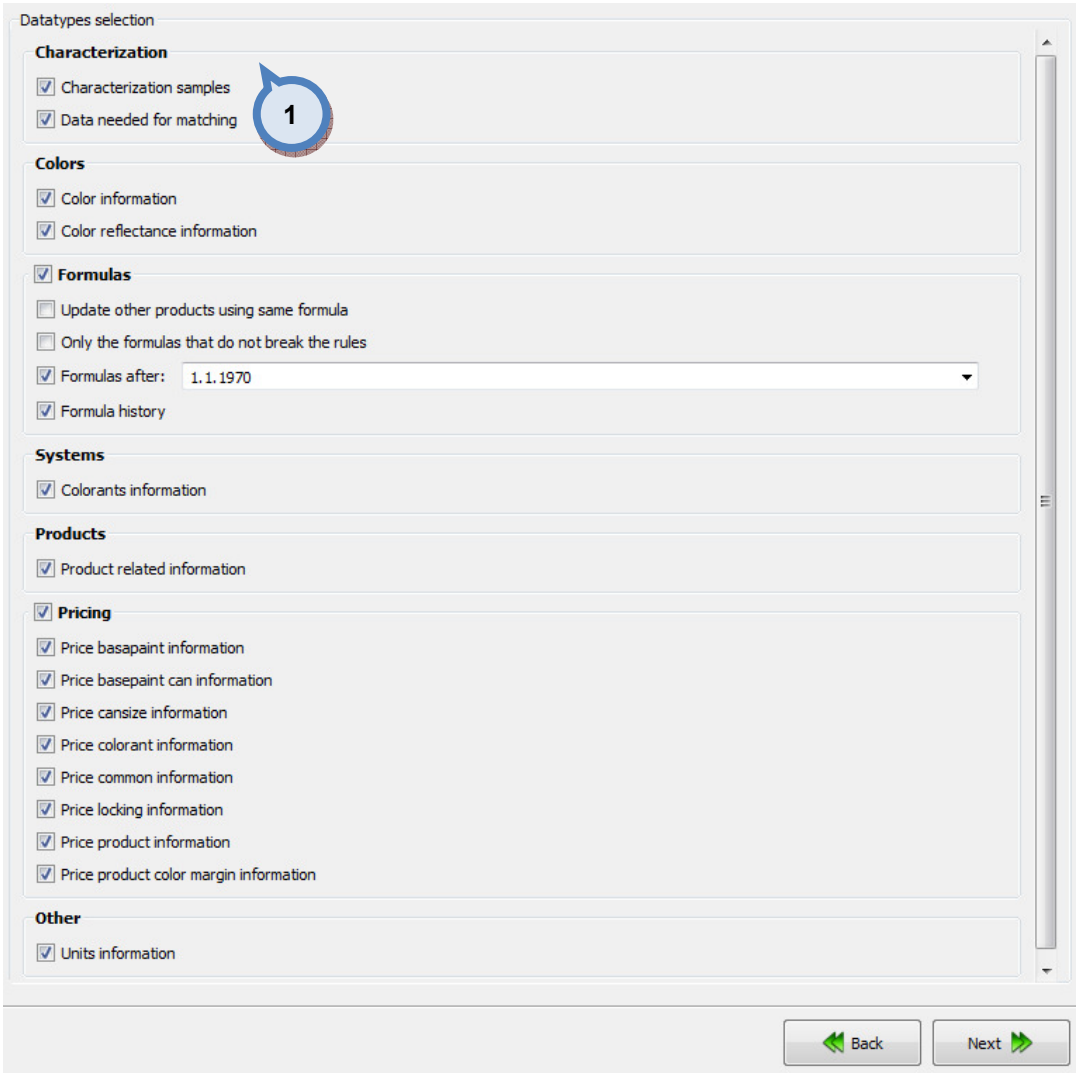
3.Destination type: The drop down list to select a destination database type.

4.Enable rollback: When the check box is enabled, the previous database can be restored.

5.Dataconflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

Next window in the export wizard is: Datatypes selection

In the **Datatypes selection** page, you have the following options:



1.When check boxes are enabled, the corresponding information is included in to the export file.

Characterizations

- **Characterization samples**
- **Data needed for matching:** When this option is selected, also Colorants information as well as the Color reflectance information has to be included.

Colors

- **Color information**
- **Color reflectance information**

Formulas

- **Update other products using same formula**
- **Only the formulas that do not break the rules**
- **Formulas after:** The text field to type in the date of the oldest possible formula included in to the export file.
- **Formula history**

Systems

- **Colorants information**

Products

- **Product related information**

Pricing

- **Price basepaint information**
- **Price basepaint can information**
- **Price cansize information**
- **Price colorant information**
- **Price common information**
- **Price locking information**
- **Price product information**
- **Price product color margin information**

Other

- **Units information**

Next window in the export wizard is: Zones and Systems checklist

In the **Zones and Systems checklist** page, you have the following options:

1.Zones: When check box is enabled, the corresponding zone is included in to the export file.

2.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and Color cards checklist.

In the **Products and Color cards checklist** page, you have the following options:

1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

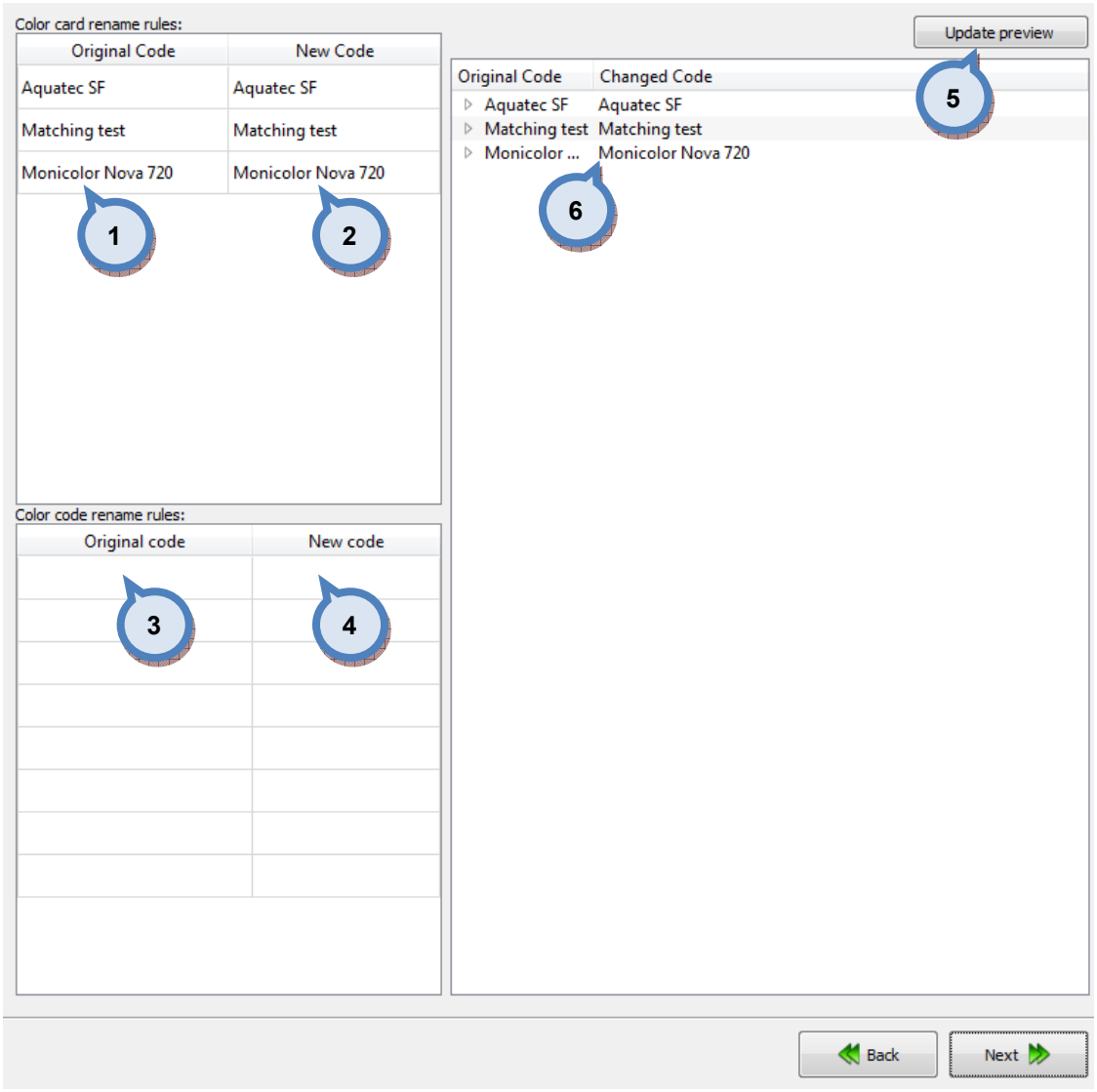
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

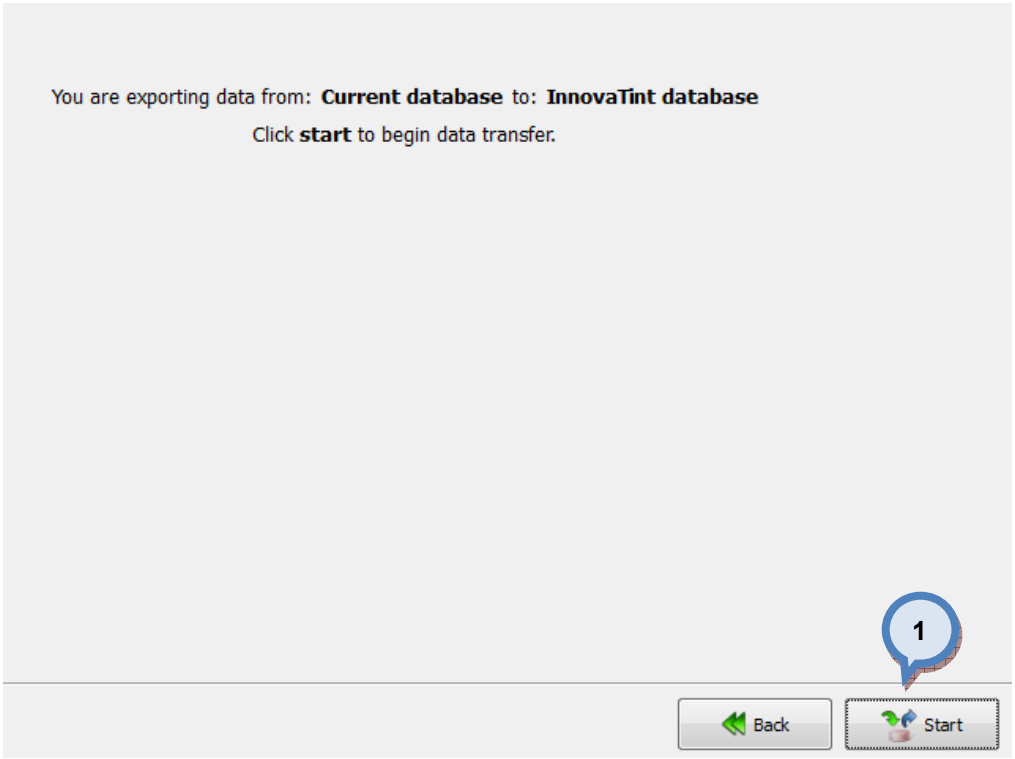
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

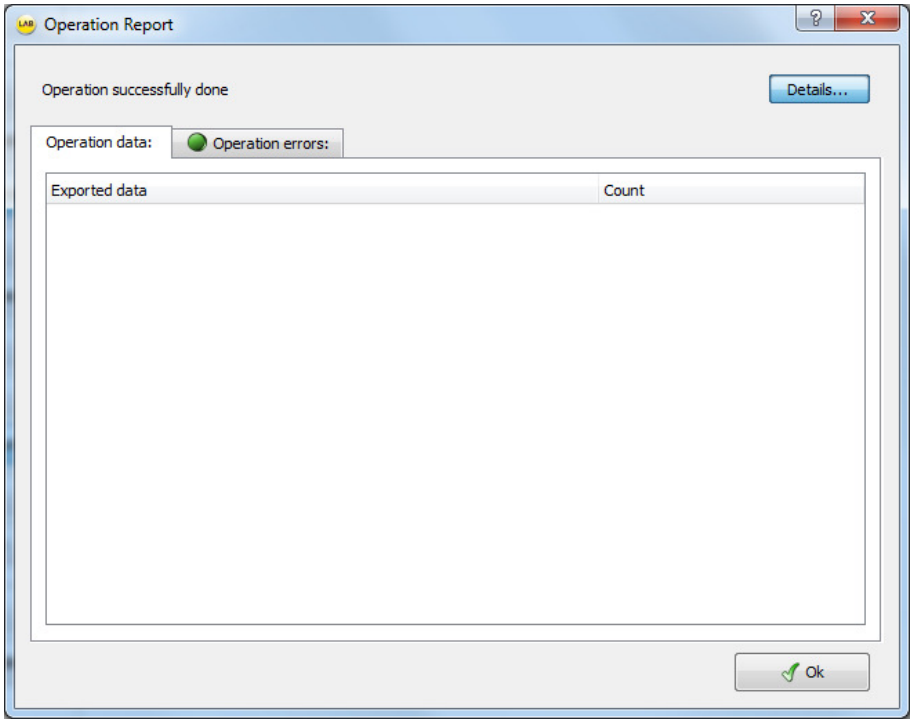
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:

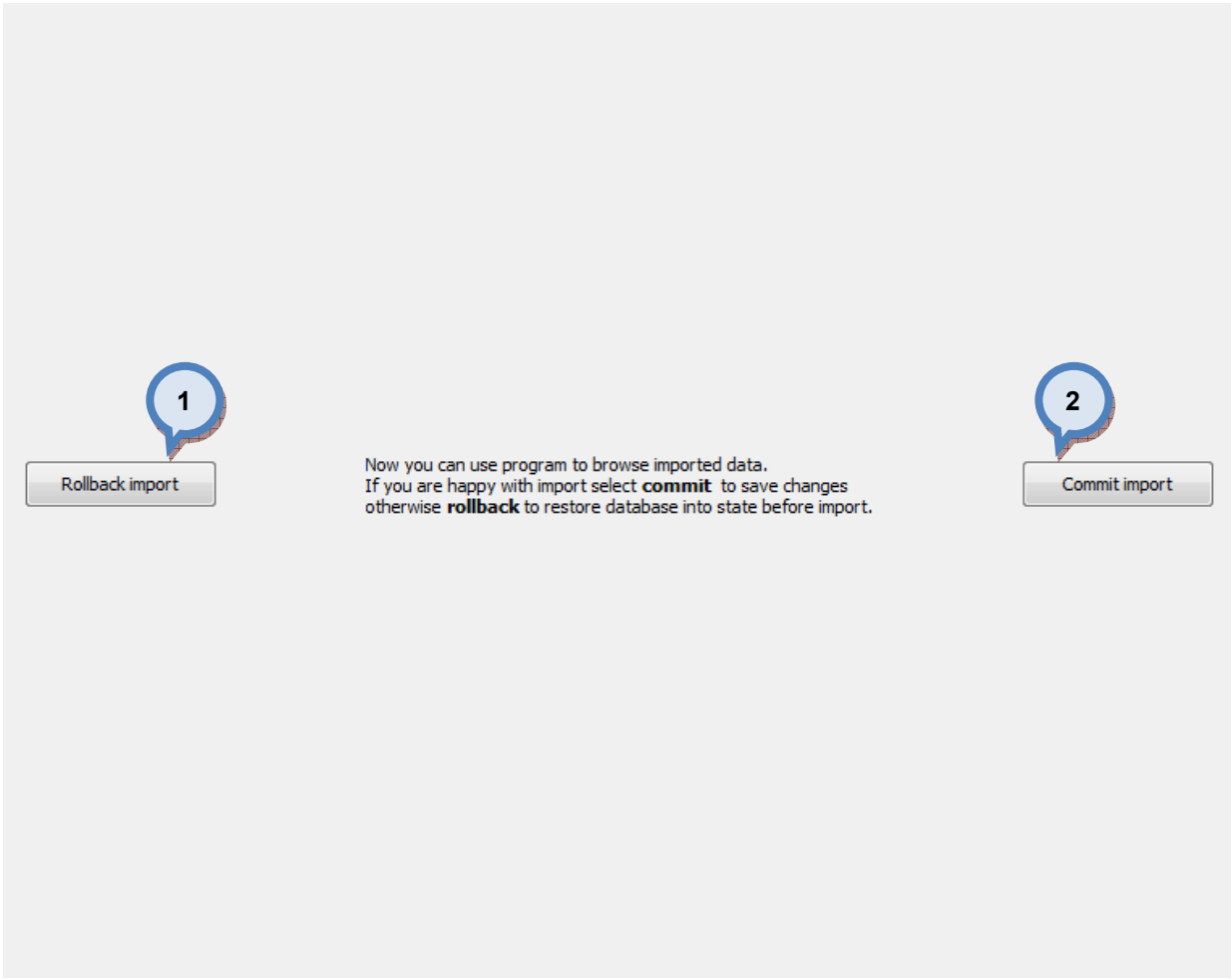


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



In the **Commit import** page, you have the following options:

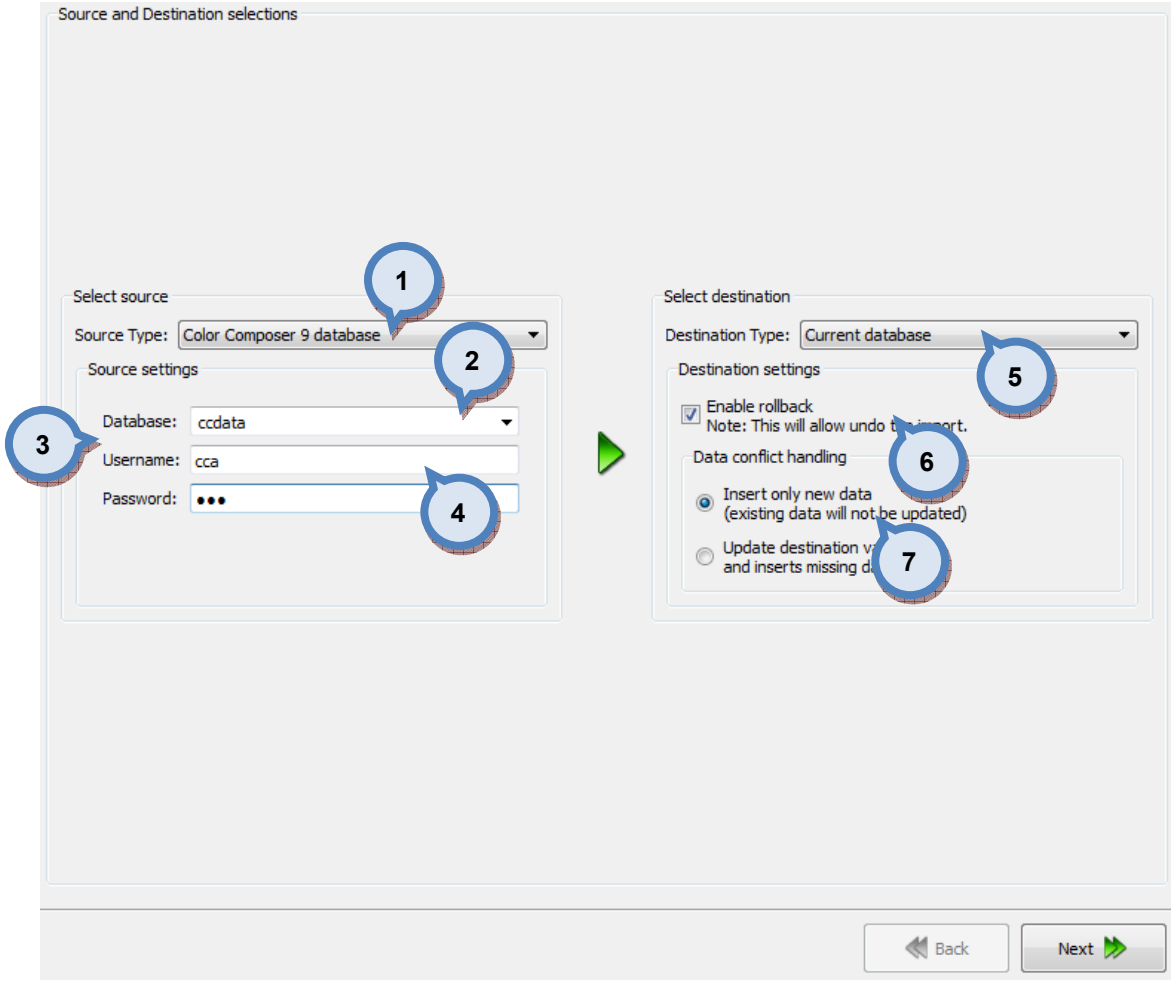


1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

4.5.8 Export from the Colour Composer 9 database into the current database

When **Colour Composer 9 database** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Select source: The drop down list to select a source database type.

2.Database: The drop down menu to select a source database.

3.Username: The text field to enter a user name for the source database.

4.Password: The text field to enter a password for the source database.

5.Destination type: The drop down list to select a destination database type.

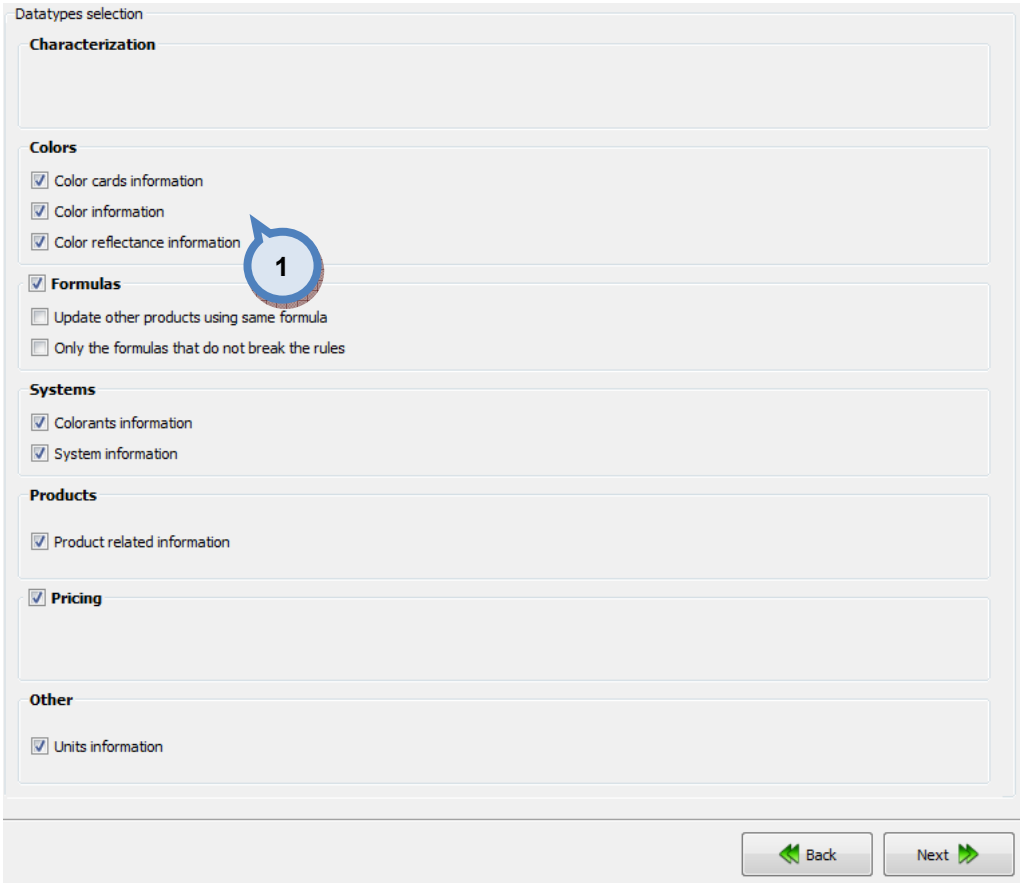
6.Enable rollback: When the check box is enabled, the previous database can be restored.

7.Dataconflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

Next window in the export wizard is: Datatypes selection.

Note: Colour Composer 9 database must have an unique server name set in its ODBC settings.

In the **Datatypes selection** page, you have the following options:



1.When check boxes are enabled, the corresponding information is included in to the export file.

Colors

- **Color cards information**
- **Color information**
- **Color reflectance information**

Formulas

- **Update other products using same formula**
- **Only the formulas that do not break the rules**

Systems

- **Colorants information**
- **System information**

Products

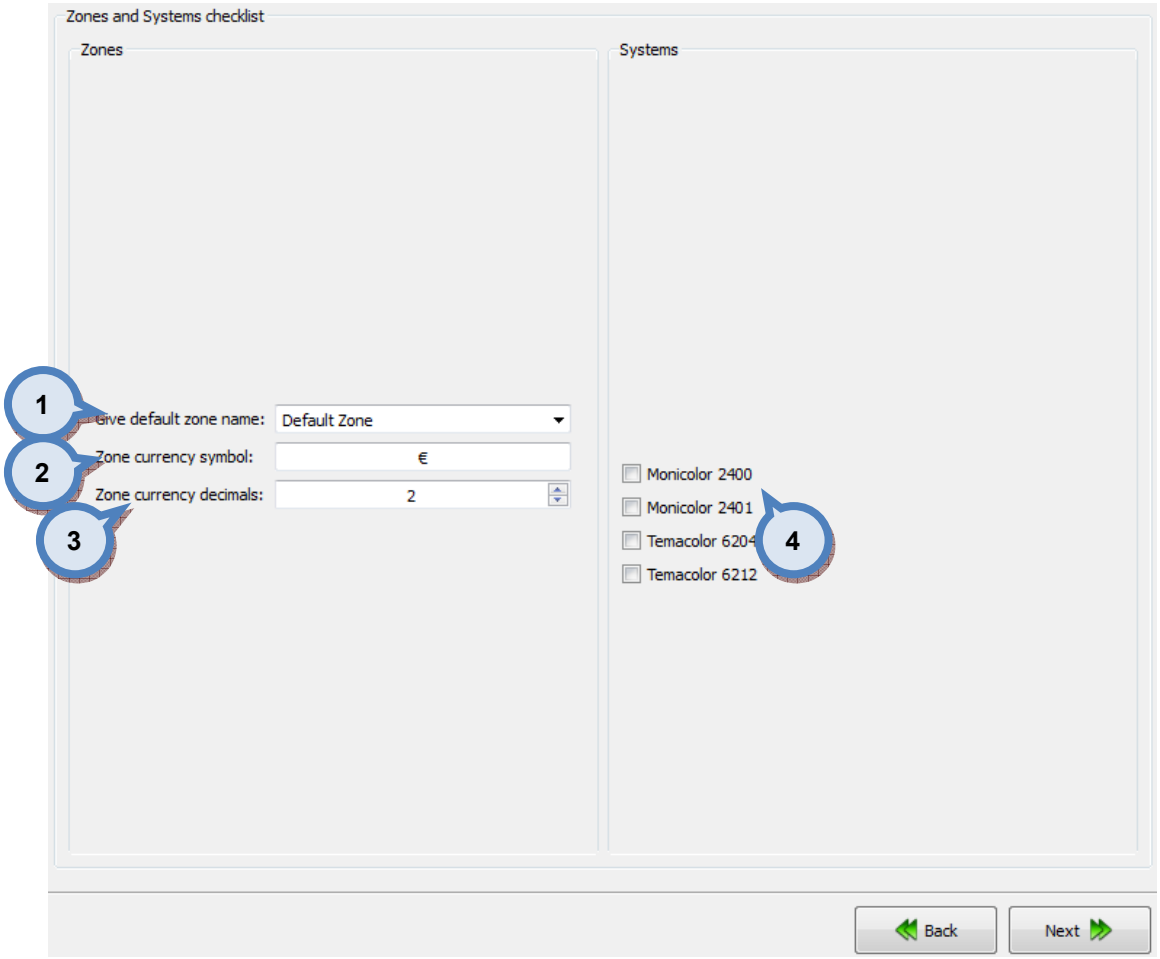
- **Product related information**

Pricing

Units information

Next window in the export wizard is: Zones and Systems checklist

In the **Zones and Systems checklist** page, you have the following options:



1.Give default zone name: The drop down field to select a zone, or to create new.

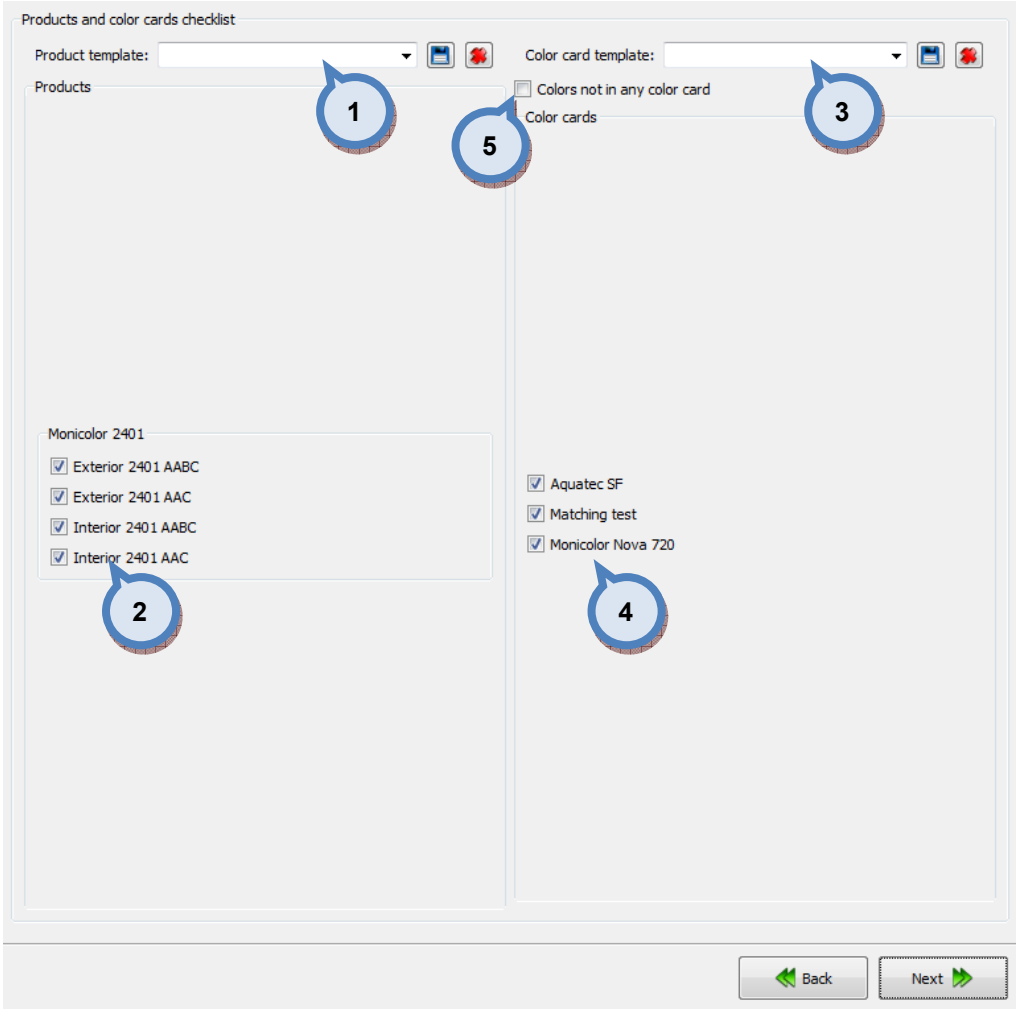
2.Zone currency symbol: The text box to enter a currency symbol

3.Zone currency decimals: The selector field to select the number of decimals used for the currency values.

4.Systems: When check box is enabled, the corresponding system is included in to the export file.

Next window in the export wizard is: Products and color card checklist.

In the **Products and Color cards checklist** page, you have the following options:



1.Product template: The drop down list to select a product template. Use button to save a template, and button to delete a selected template.

2.Products: When check box is enabled, the corresponding product is included in to the export file.

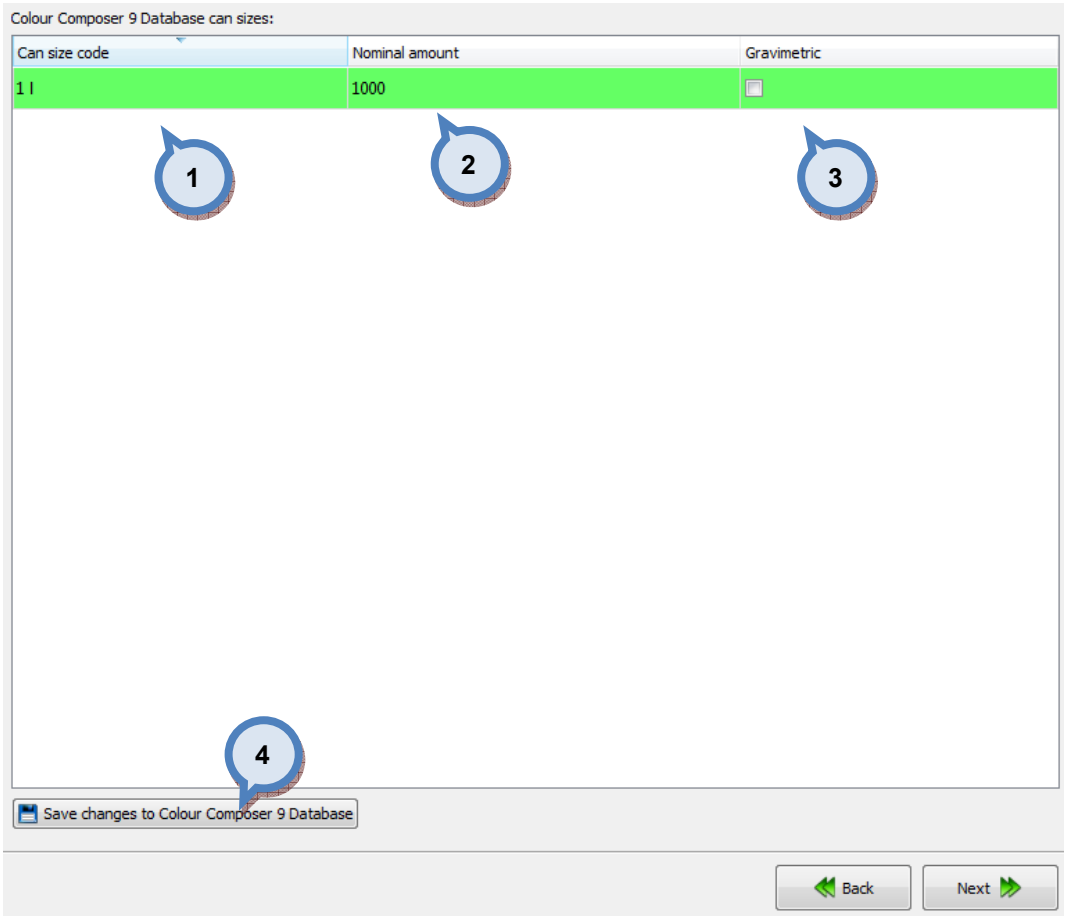
3.Color card template: The drop down list to select a color card template. Use button to save a template, and button to delete a selected template.

4.Color cards: When check box is enabled, the corresponding color card is included in to the export file.

5.Colors not in any color card: When the check box in enabled. also the color not belonging to any color card will be included in to the export file.

Next window in the export wizard is: Colour Composer 9 database can sizes

In the **Colour Composer 9 database can sizes** page, you have the following options:



1.Can size code: The text field for the can size code.

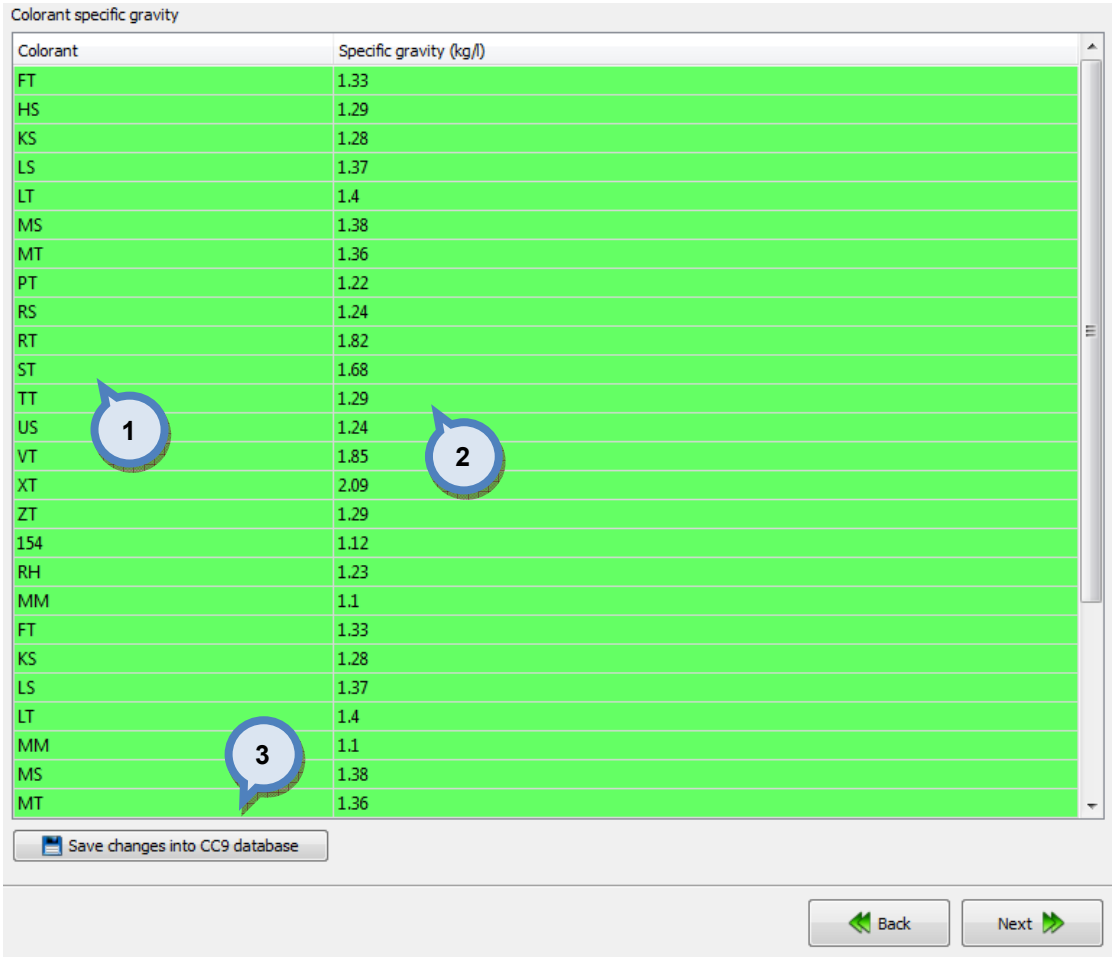
2.Nominal amount: The text field for the can size (nominal amount). You can change the amount by double clicking the cell with the left mouse button. The unit of the measure is millilitres, or grams if the gravimetric check box is selected in section (3).

3.Gravimetric: When the check box is enabled, the can size is treated as gravimetric, otherwise the can size is treated as volumetric.

4.Save changes to Colour Composer 9 database: The button to save changes made to can nominal amounts (item (2)) into to the Colour Composer 9 database (the source database).

Next window in the export wizard is: Colorant specific gravity.

In the **Colorant specific gravity** page, you have the following options:



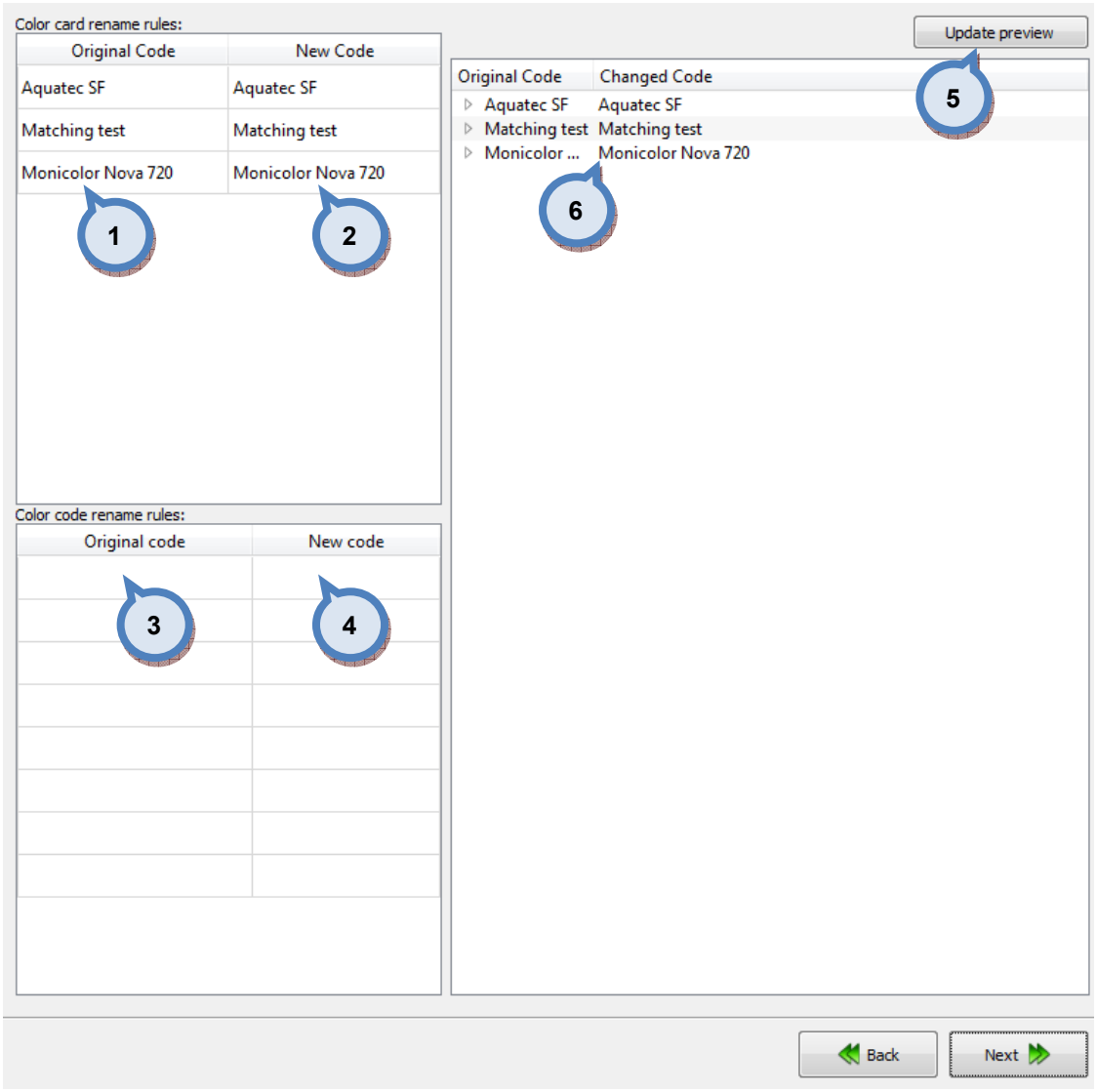
1.Colorant: The text field for the colorant code.

2.Specific gravity: The text field for the colorant specific gravity. You can change the amount by double clicking the cell with the left mouse button. The unit of the measure is kg/litre.

3.Save changes to Colour Composer 9 database: The button to save changes made to colorant specific gravity (item (2)) into to the Colour Composer 9 database (the source database).

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

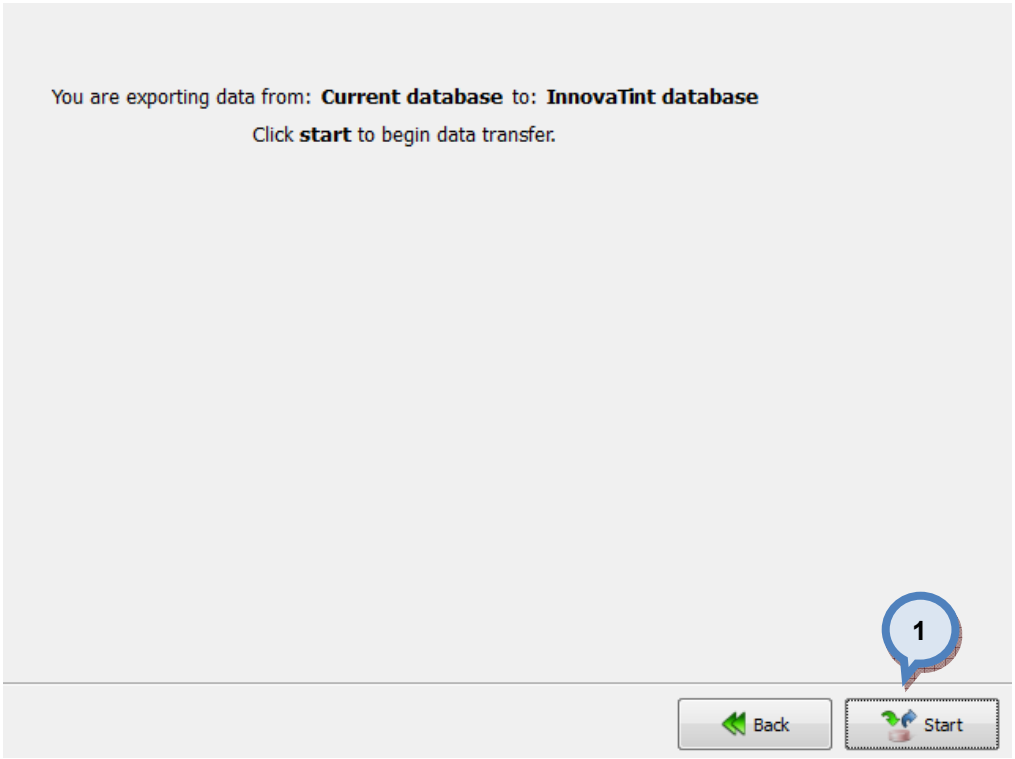
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

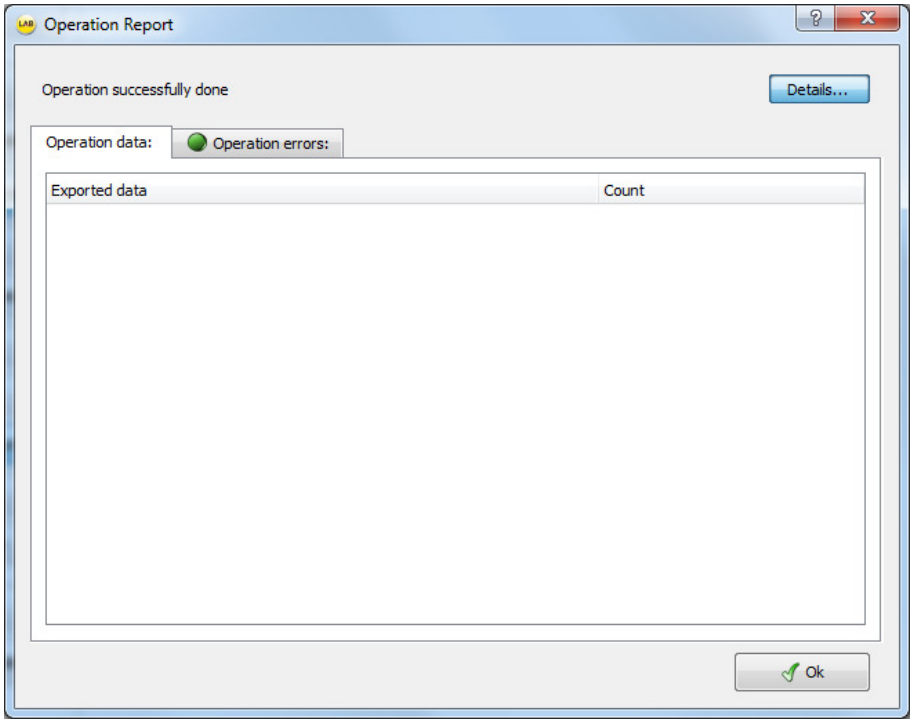
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:

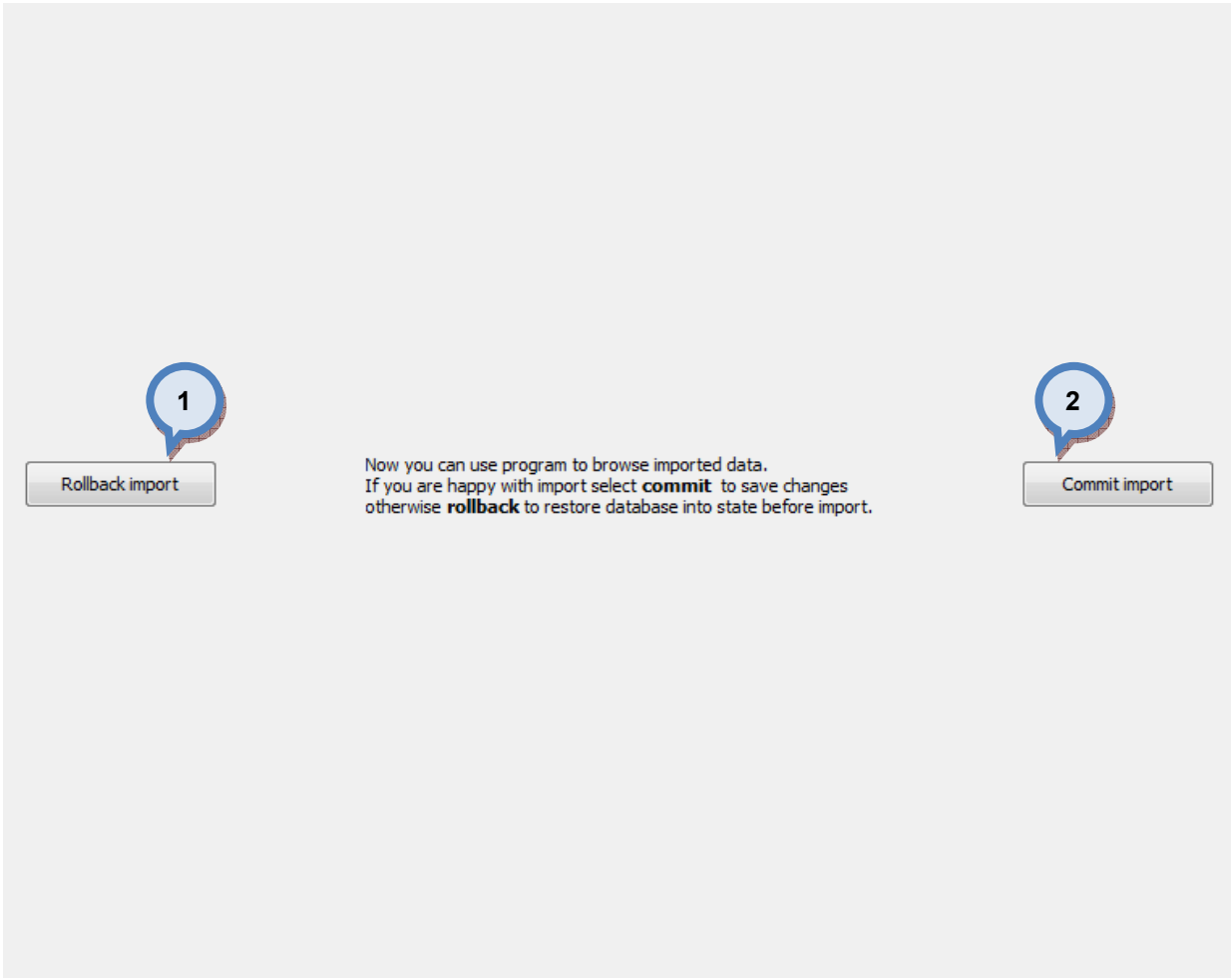


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



In the **Commit import** page, you have the following options:

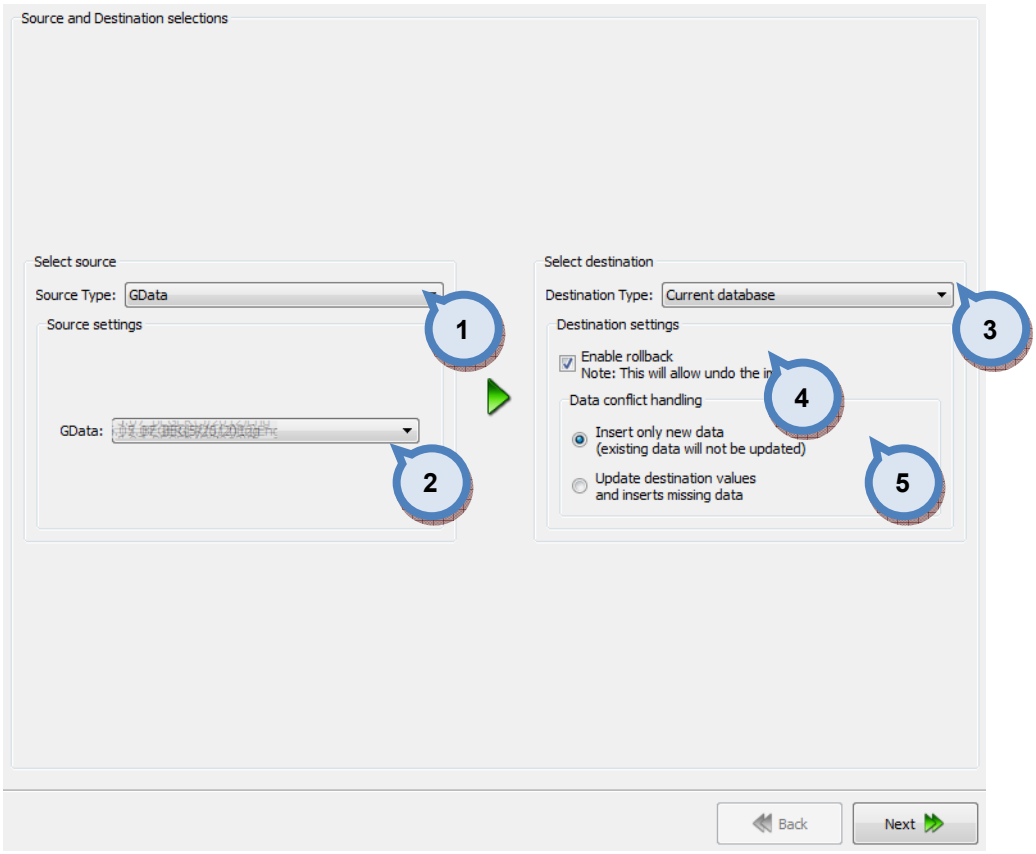


1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

4.5.9 Export from the Gdata into the current database

When **Gdata** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Source Type: The drop down list to select a source database type.

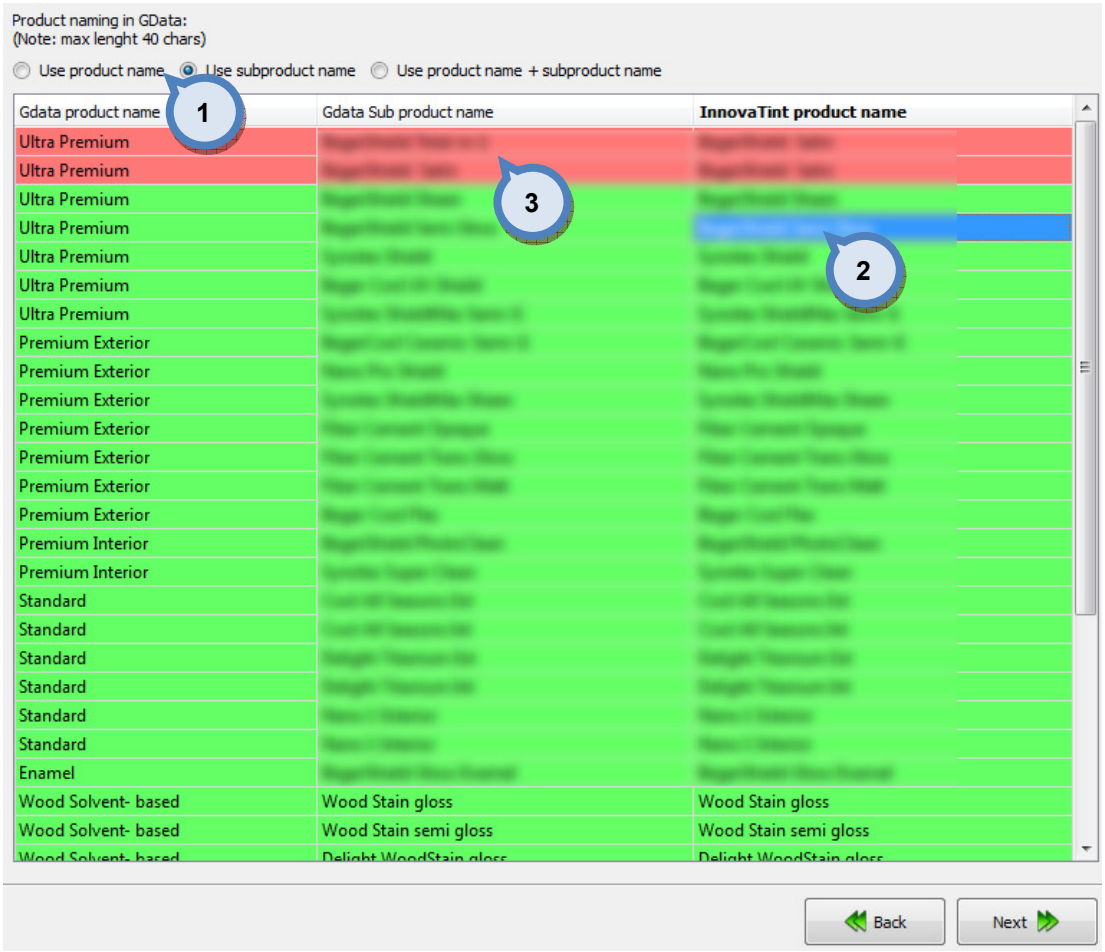
2.Gdata: The drop down list to select a source database.

3.Destination Type: The drop down list to select a destination database type.

4.Enable rollback: When the check box is enabled, the previous database can be restored.

5.Data conflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

Next window in the export wizard is: Product naming in Gdata.

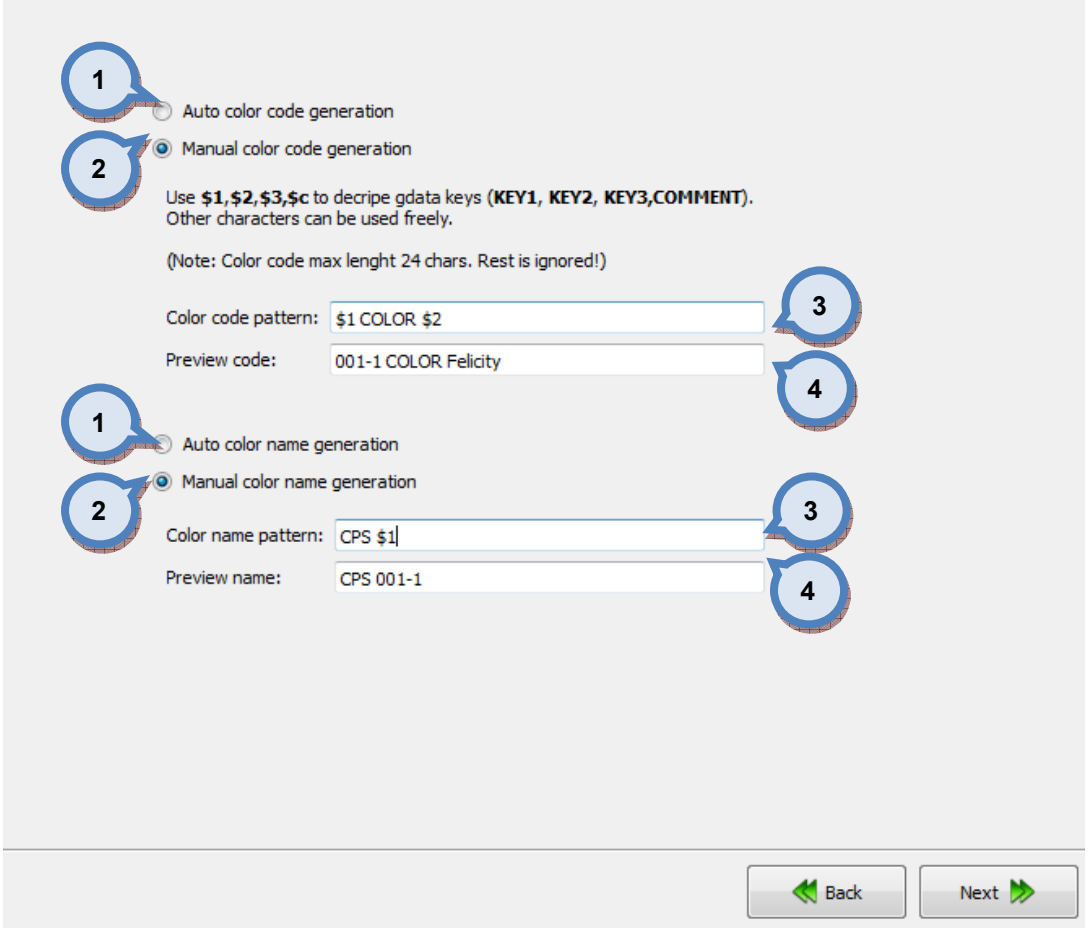


1.Product naming: The radio buttons which are used to select the naming method when transferring the data from the Gdata into the Innovatint. Options are: Use Gdata product name, Use Gdata subproduct name, and Use Gdata product name and subproduct name. You can see both Gdata product name and the Gdata sub product names in the table as well as the suggested Innovatint name based on your selection.

2.Innovatint product name: The column in the list that shows suggested product name to be used in the Innovatint, based on the selection in the section (1). You can also manually edit the Innovatint name. Activate the edit mode by double clicking the text field with left mouse button.

3.Row with the red background color: When the naming is not unique, i.e. there are two or more products in the Innovatint product name column with the same name, those rows are marked with the red background color. Double click with left mouse button to edit the name manually.

Next window in the export wizard is: Color code / color name.



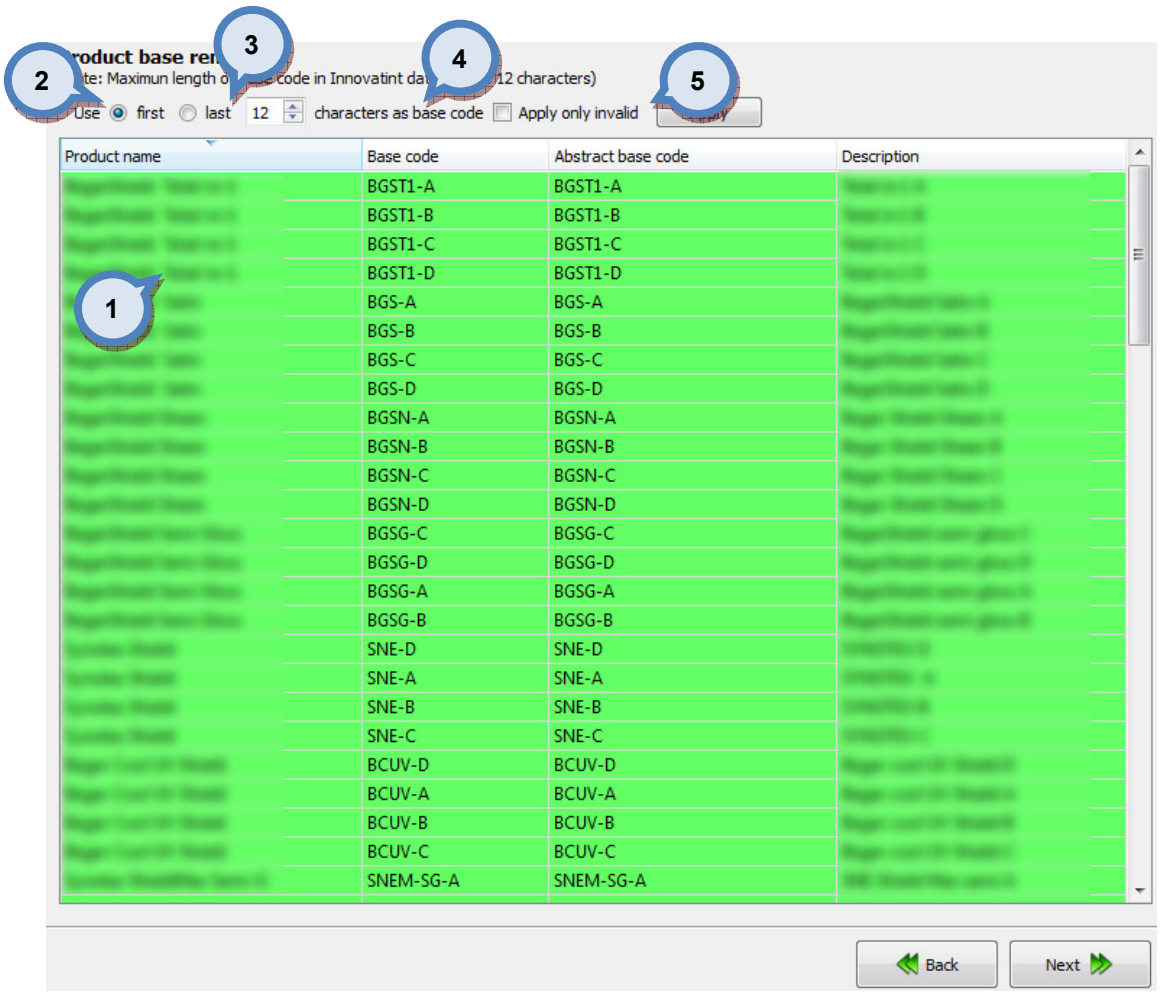
1.Auto color code /name generation: When the radio button is selected, color code / color name is generated automatically by combining the Gdata fields (KEY1-3+Comment) to generate the unique codes/names.

2.Manual color code /name generation: When the radio button is selected, color code / color name can be set manually, by typing the pattern into field (3).

3.Color code / name pattern: The text field to type in the pattern of how the color code / color name is generated. Use $1, $2, $3, $c characters to use Gdata keys in the code / name, i.e KEY1, KEY2, KEY3, COMMENT. Other characters can be freely added. Preview of the first code / name is shown on the field (4).

Note: If the given rule generates identical codes, the duplicates generated are neglected, as only the unique codes are accepted.

Next window in the export wizard is: Product base rename.



1.Table: The table to preview the Product name, the Base code, the Abstract base code, and the Description. The base code is dependent on the selection on the section (2). Or you can double click the cell to manually change the codes.

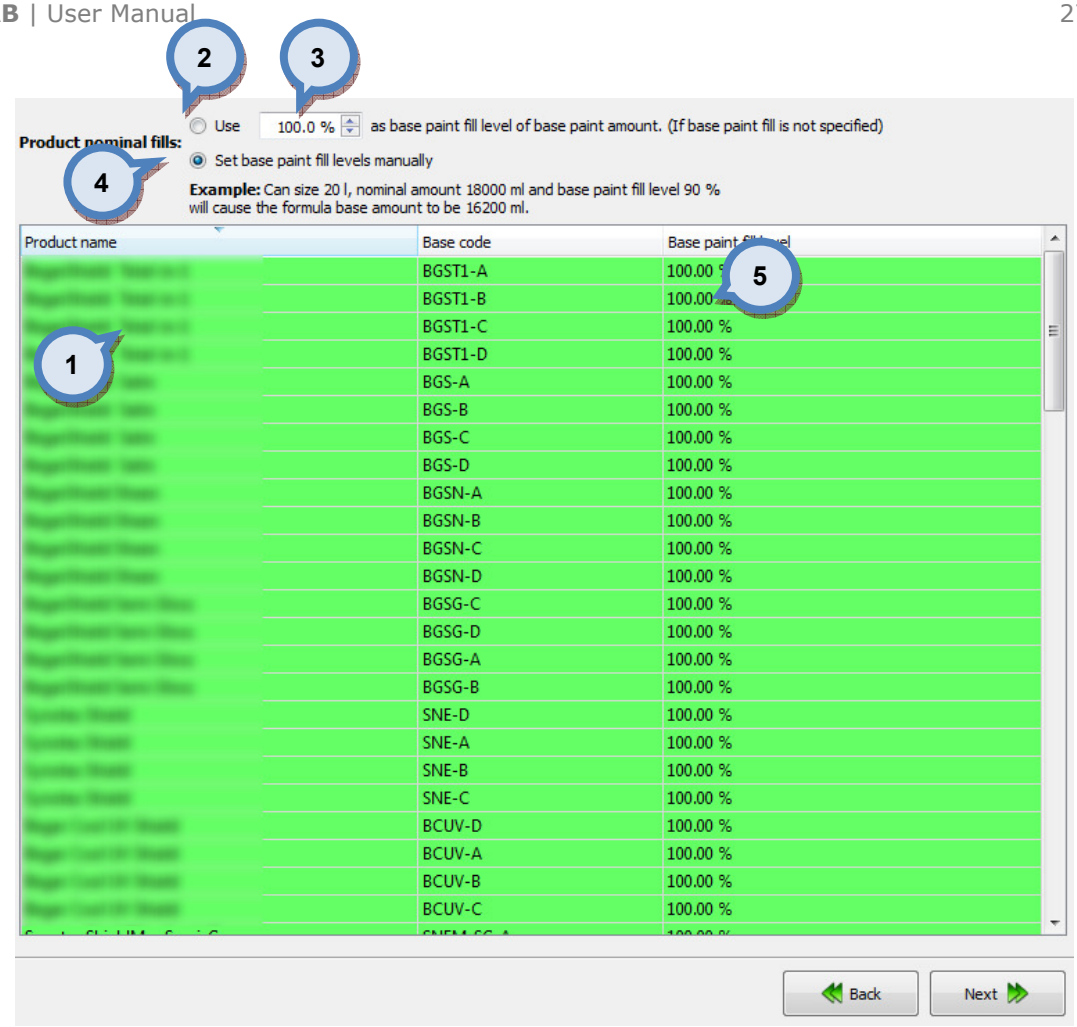
2.Use first / last: The radio button to select if the first or last characters of the product name are used as the Base code. Use selector field (3) to set how many characters are used. The maximum number of the characters are 12.

3.Characters as base code: The selector field to set how many characters are used in the base code. The maximum number of the characters are 12.

4.Apply on invalid: When the check box is enabled, and if there are invalid Base codes (i.e. marked with the red background color), the rules on sections (2) and (3) are applied.

5.Apply: The button to generate the base codes based on the rules (2), (3), and (4).

Next window in the export wizard is: Base paint filling levels.



1.Table: The table to preview the Product name, the Base code, the Base paint filling level.

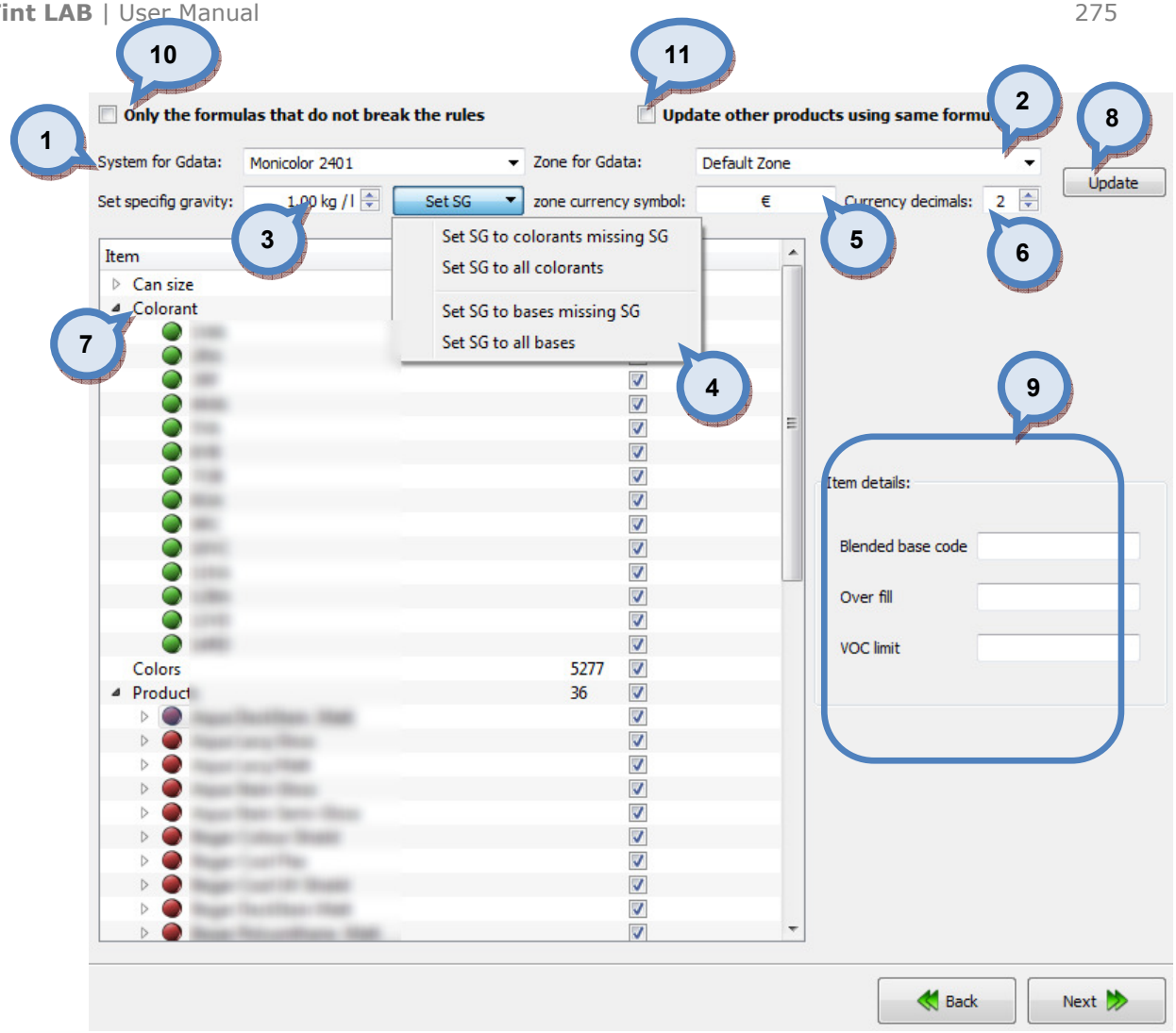
2.Use: When the radio button is selected the number in the selector field (3) is used as base paint filling level, when filling level is not specified for the base paint.

3.as base paint filling level of base paint amount: The number in the selector field is used as base paint filling level, when filling level is not specified for the base paint. (Radio button 2/4 has to be selected as 2.

4.Set base paint fill levels manually: When the radio button is selected, the base paint filling levels can be set manually into the column (5).

5.Base paint fill level: The column to display the filling levels of the base paints. To manually edit the filling levels, set radio button (4) and double click the column with the left mouse button.

Next window in the export wizard is: System for Gdata.



1.System for Gdata: The drop down list to select the system for the Gdata.

2.Zone for Gdata: The drop down list to select the zone for the Gdata.

3.Set specific gravity: The selector field to set a density for the items selected with button (4).

4.Set SG: The button (the drop down list opens up with the click) set specific gravity value set in field (3) to items:

-The colorants that are missing the specific gravity value.

-The all of the colorants.

-The base paints that are missing the specific gravity value.

-The all of the base paints.

5.currency symbol: The text field to enter a used currency symbol, like €, $,or £.

6.Currency decimals: The selector field to select how many decimals are used in the currency.

7.Items: The table to display all of the items: Can size, Colorant, Colors, Products, and Formulas. Click on the ► symbol to navigate to the lower levels on each of the items. Items which require attention are marked with red traffic light. Import will not succeed unless all areas fixed, use Update after the changes (8)

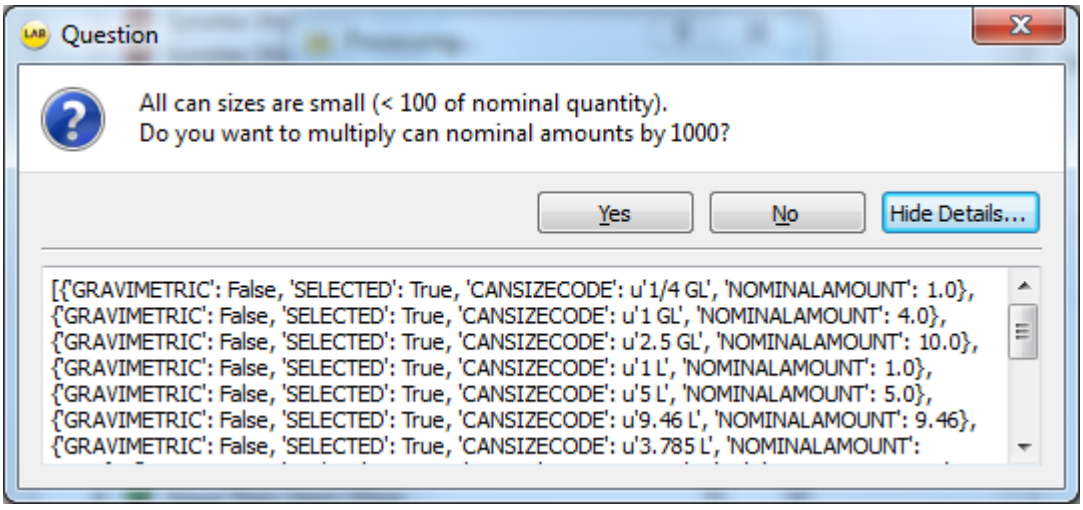
8.Update: The button to update items table (7) based on the selections on the previous fields.

9.Item details: The window section to display detailed items on each of items (7), when any one of them is selected (highlighted). When navigating into the lower levels on the items table (7), more item details are shown on the section (9). See further details about this one the following pages.

10. Only the formulas that do not break the rules: If the check box is enabled, only valid formulas get imported, see more information **Matching rules** area.

11. Update other products using same formula: If the check box is enabled all products using the updated formula will get the same.

Some Gdata's are constructed assuming that base paint volumes are litres instead of millilitres as they are supposed to be. To prevent misconfiguration during the import additional checking for these occasions is added.

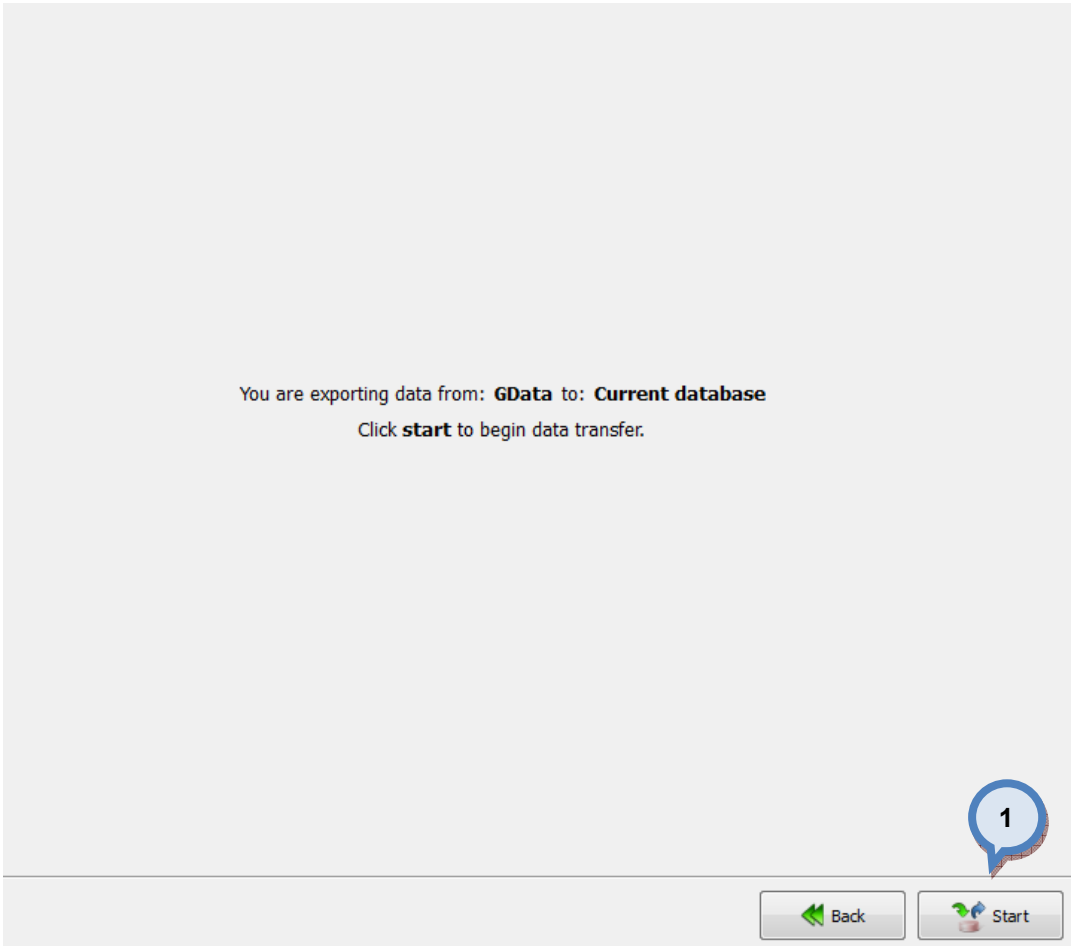


Selected item on the table (7)	Item details	Description
Can size	non	
One specific can size (e.g. 1000ml)	Can size code	Free text
"	Gravimetric	Check box, Enabled = True
"	Nominal amount	Millilitres
Colorants	Non	
One specific colorant (e.g. MS)	RGB	RGB (Color value) in 8 digit format.
"	SG (kg/l)	Specific gravity. Unit of measure is kg/litre.
"	VOC (g/l)	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
Colors	Non	
Products	non	
One specific product	Blended base code	Free text field
	Over fill	True = T or False = F
	VOC limit	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
One specific base paint	Abstract base code	Free text field
	Base code	Free text field
	Multiply	Number between 1- 999999999
	Max fill	Number between 0 – 1, when 0.1= 10%
	Min fill	Number between 0 – 1, when 0.1= 10%
	Nominal fill	Number between 1- 999999999
	SG (kg/l)	Specific gravity. Unit of measure is kg/litre.
	Top off	True = T or False = F
	VOC (g/l)	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
Formulas	Non	
One specific base paint	Base amount	
	Base code	Free text
	Multiply	Number between 1- 999999999

Note:Input the required information into the field with Red, before proceeding.

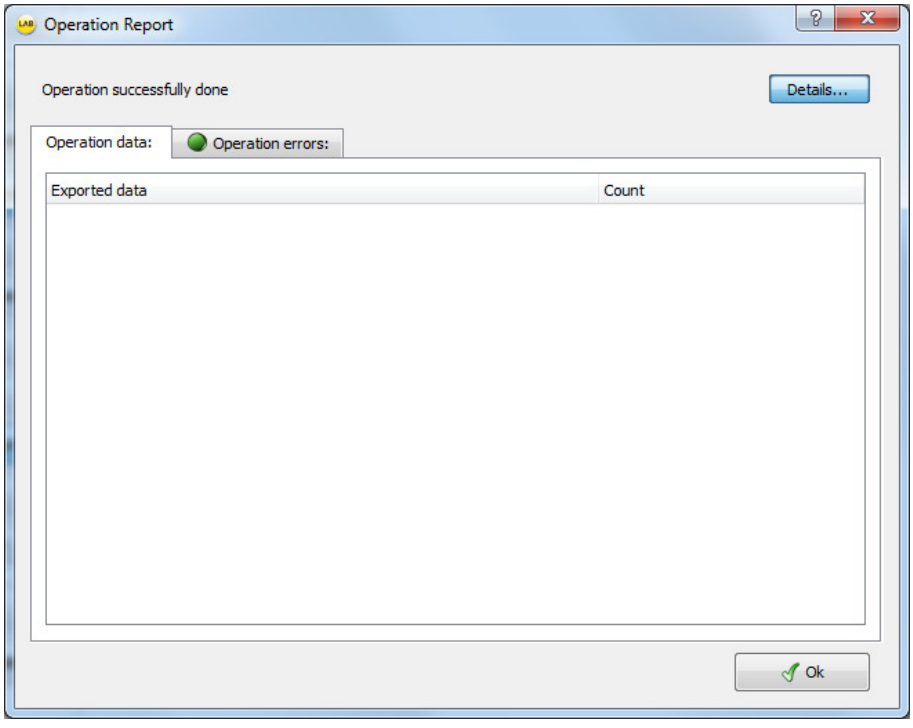
Next window in the export wizard is: Export data.

In the **Start export** page, you have the following options:

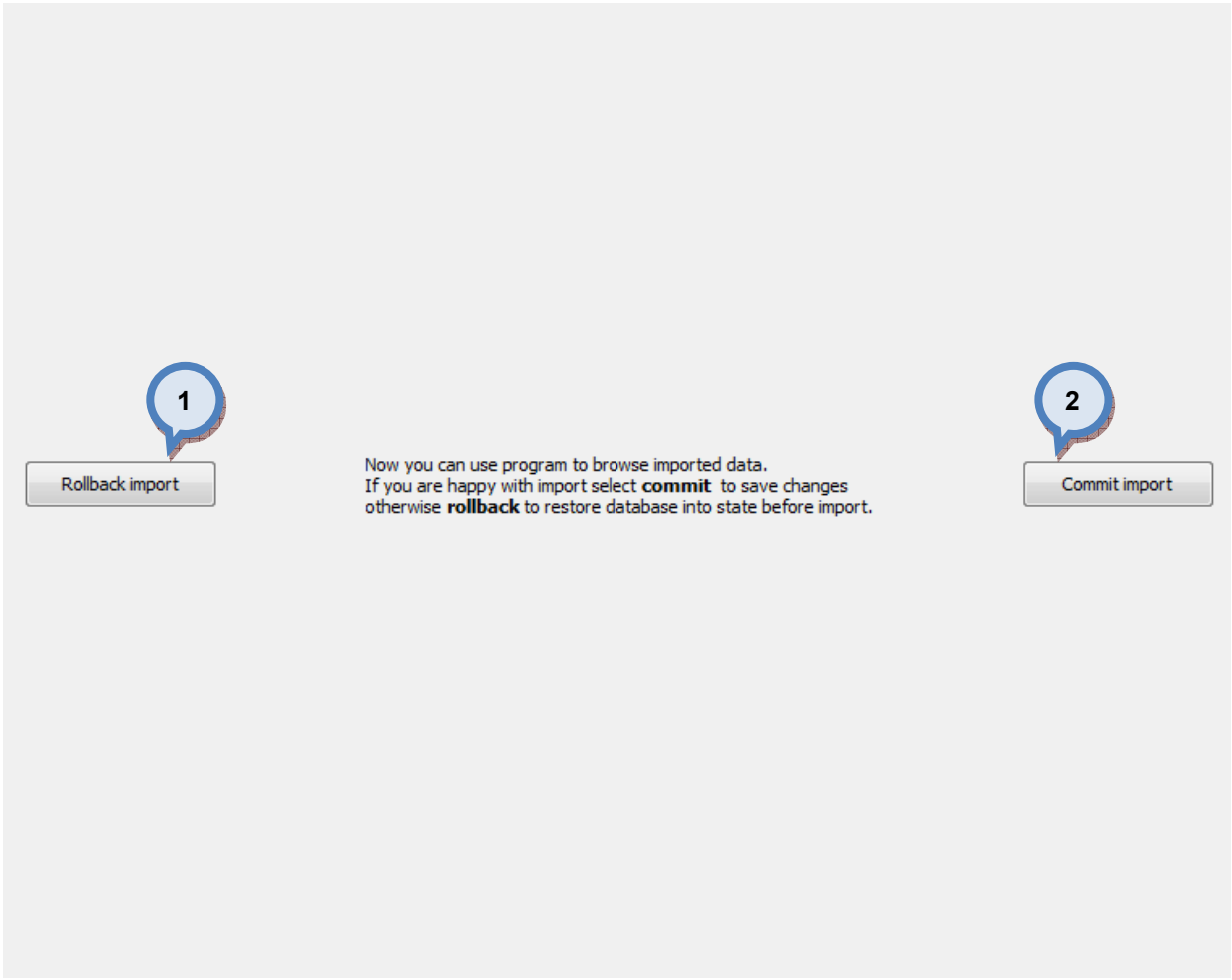


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



In the **Commit import** page, you have the following options:

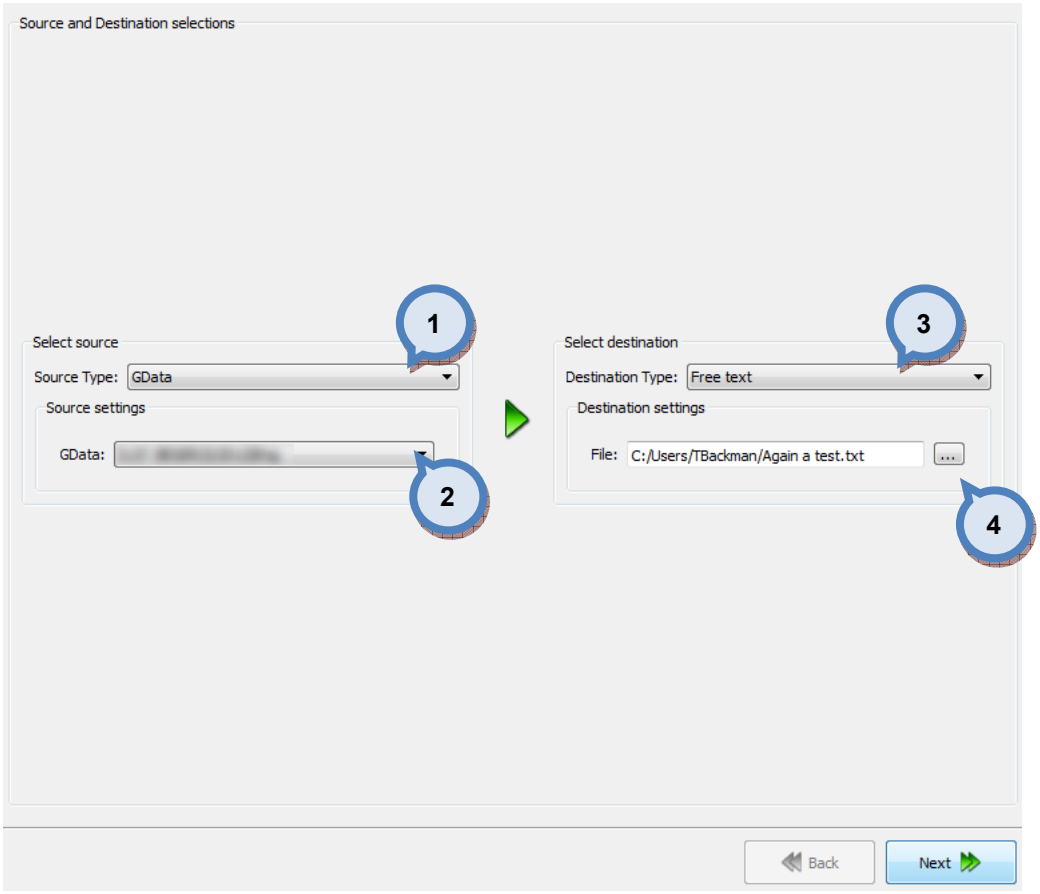


1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

4.5.10 Export from the Gdata into the free text

When **Gdata** is selected as source type and **free text** is selected as destination type, the following options are available:



1.Source Type: The drop down list to select a source database type.

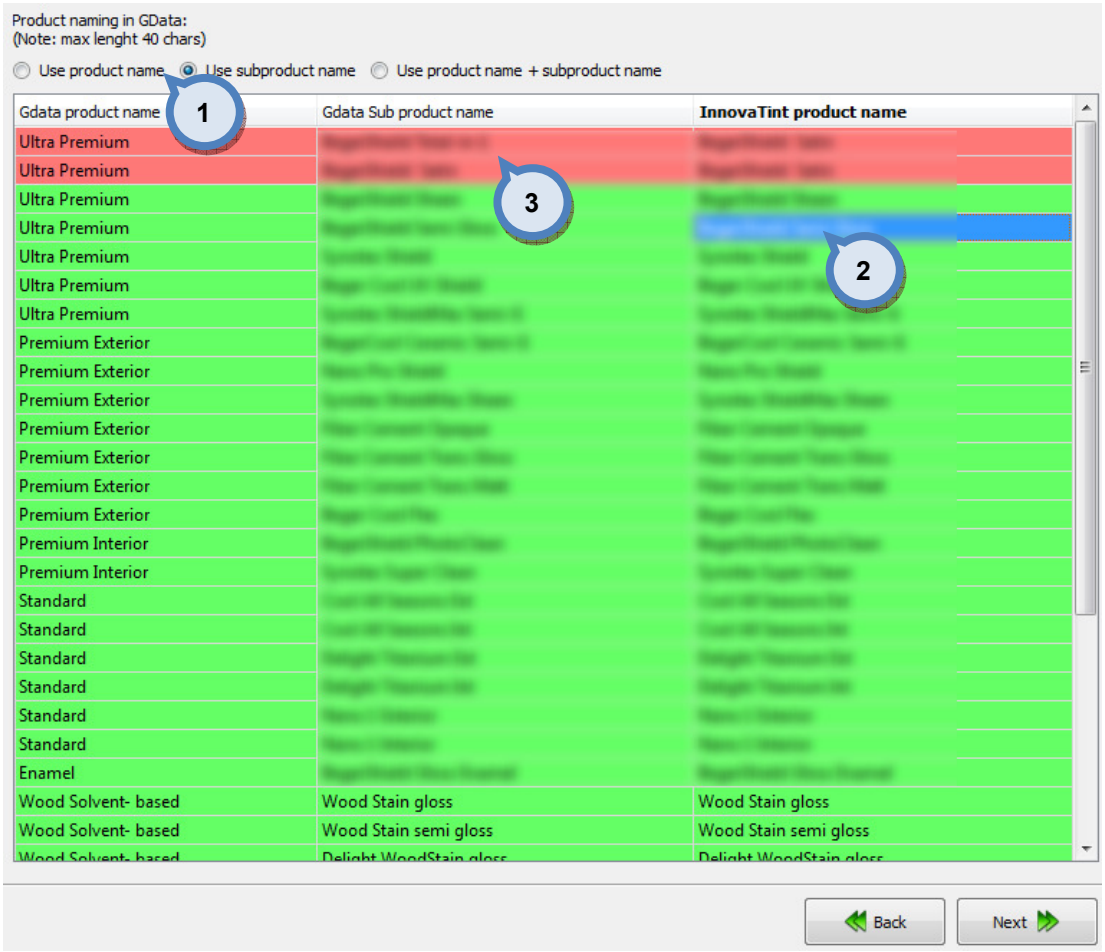
2.Gdata: The drop down list to select a source database.

3.Destination type: The drop down list to select a destination database type.

4.File: The text field to input the folder for the destination file. Use button to browse for a file.

Next window in the export wizard is: Product naming for the Gdata.

In the **Product naming for the Gdata** page, you have the following options:

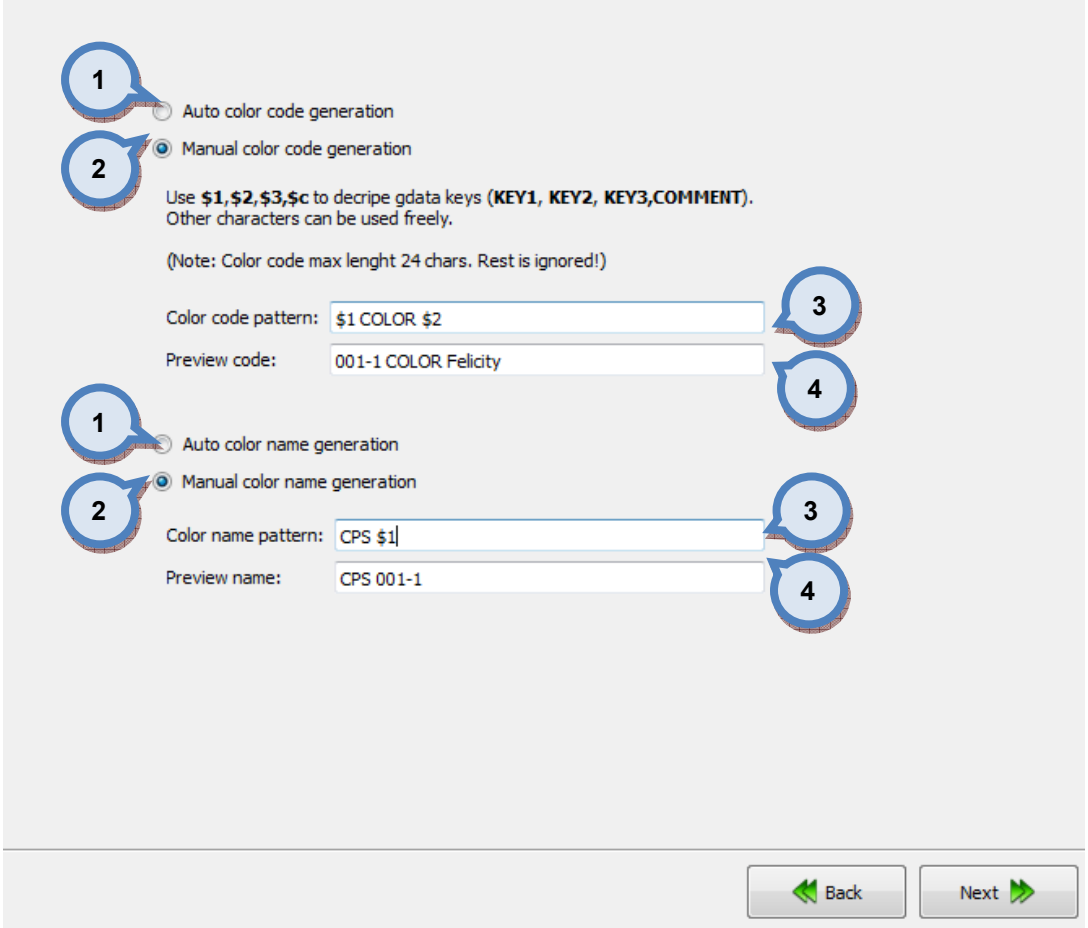


1.Product naming: The radio buttons which are used to select the naming method when transferring the data from the Gdata into the Innovatint. Options are: Use Gdata product name, Use Gdata subproduct name, and Use Gdata product name and subproduct name. You can see both Gdata product name and the Gdata sub product names in the table as well as the suggested Innovatint name based on your selection.

2.Innovatint product name: The column in the list that shows suggested product name to be used in the Innovatint, based on the selection in the section (1). You can also manually edit the Innovatint name. Activate the edit mode by double clicking the text field with left mouse button.

3.Row with the red background color: When the naming is not unique, i.e. there are two or more products in the Innovatint product name column with the same name, those rows are marked with the red background color. Double click with left mouse button to edit the name manually.

Next window in the export wizard is: Color code / color name.



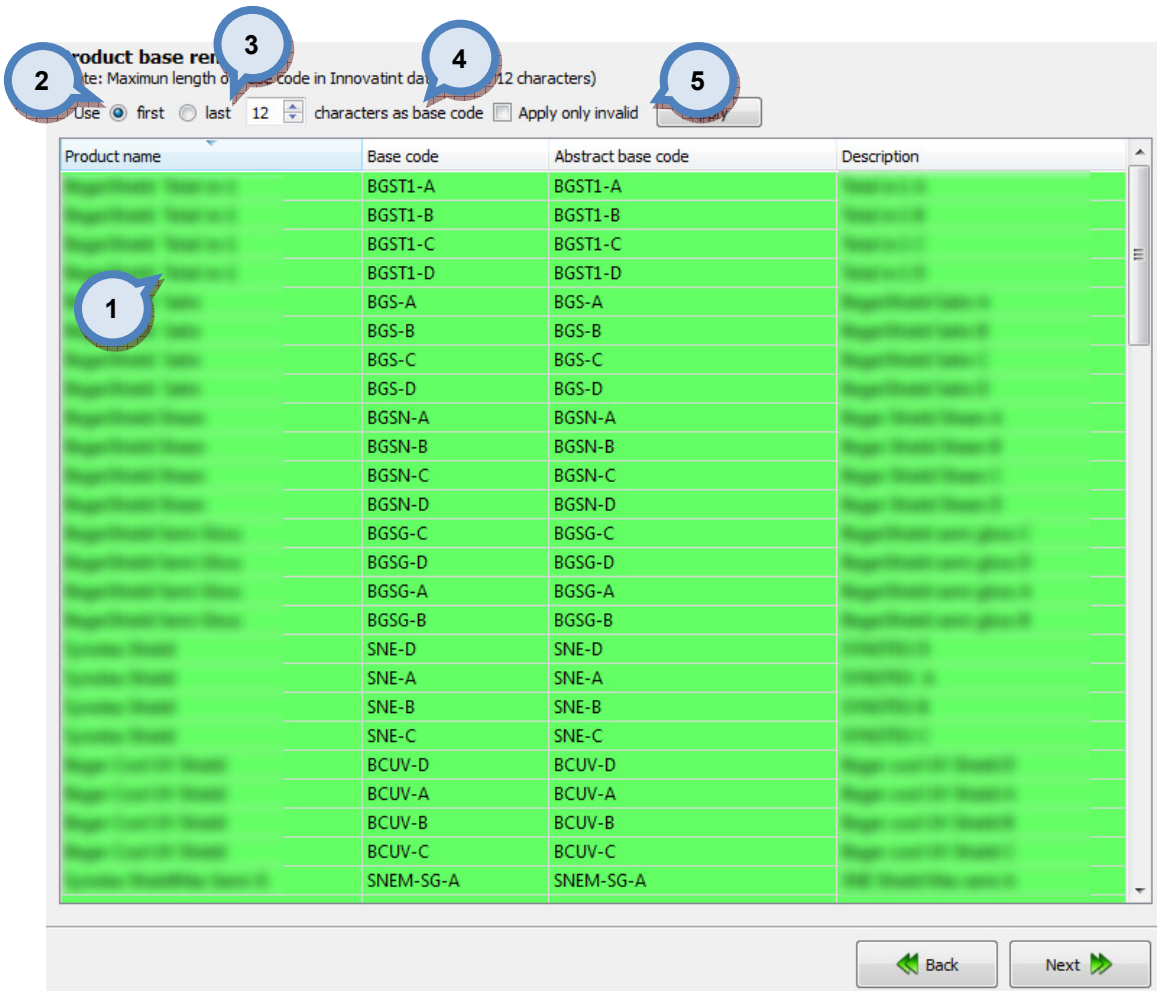
1.Auto color code /name generation: When the radio button is selected, color code / color name is generated automatically by combining the Gdata fields (KEY1-3+Comment) to generate the unique codes/names.

2.Manual color code /name generation: When the radio button is selected, color code / color name can be set manually, by typing the pattern into field (3).

3.Color code / name pattern: The text field to type in the pattern of how the color code / color name is generated. Use $1, $2, $3, $c characters to use Gdata keys in the code / name, i.e KEY1, KEY2, KEY3, COMMENT. Other characters can be freely added. Preview of the first code / name is shown on the field (4).

Note: If the given rule generates identical codes, the duplicates generated are neglected, as only the unique codes are accepted.

Next window in the export wizard is: Product base rename.



1.Table: The table to preview the Product name, the Base code, the Abstract base code, and the Description. The base code is dependent on the selection on the section (2). Or you can double click the cell to manually change the codes.

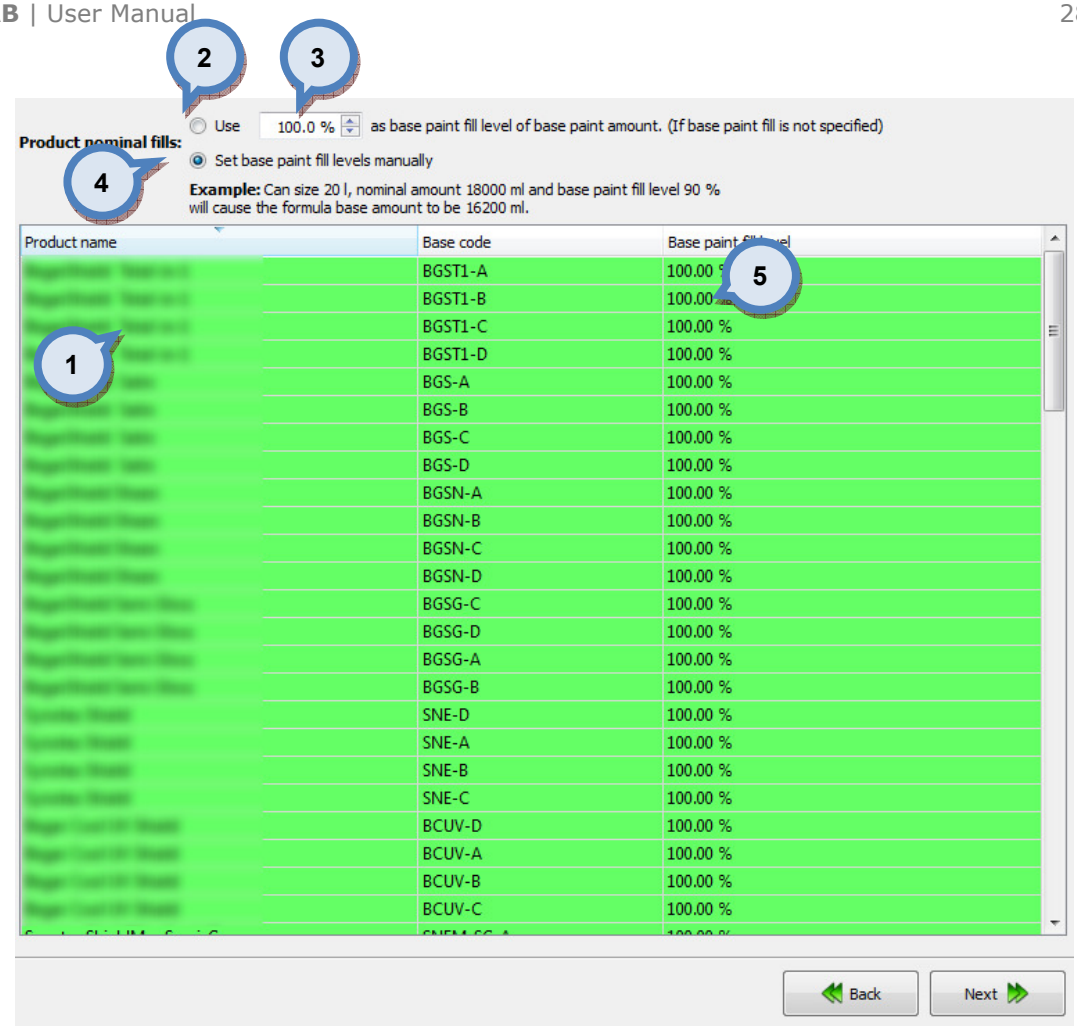
2.Use first / last: The radio button to select if the first or last characters of the product name are used as the Base code. Use selector field (3) to set how many characters are used. The maximum number of the characters are 12.

3.Characters as base code: The selector field to set how many characters are used in the base code. The maximum number of the characters are 12.

4.Apply on invalid: When the check box is enabled, and if there are invalid Base codes (i.e. marked with the red background color), the rules on sections (2) and (3) are applied.

5.Apply: The button to generate the base codes based on the rules (2), (3), and (4).

Next window in the export wizard is: Base paint filling levels.



1.Table: The table to preview the Product name, the Base code, the Base paint filling level.

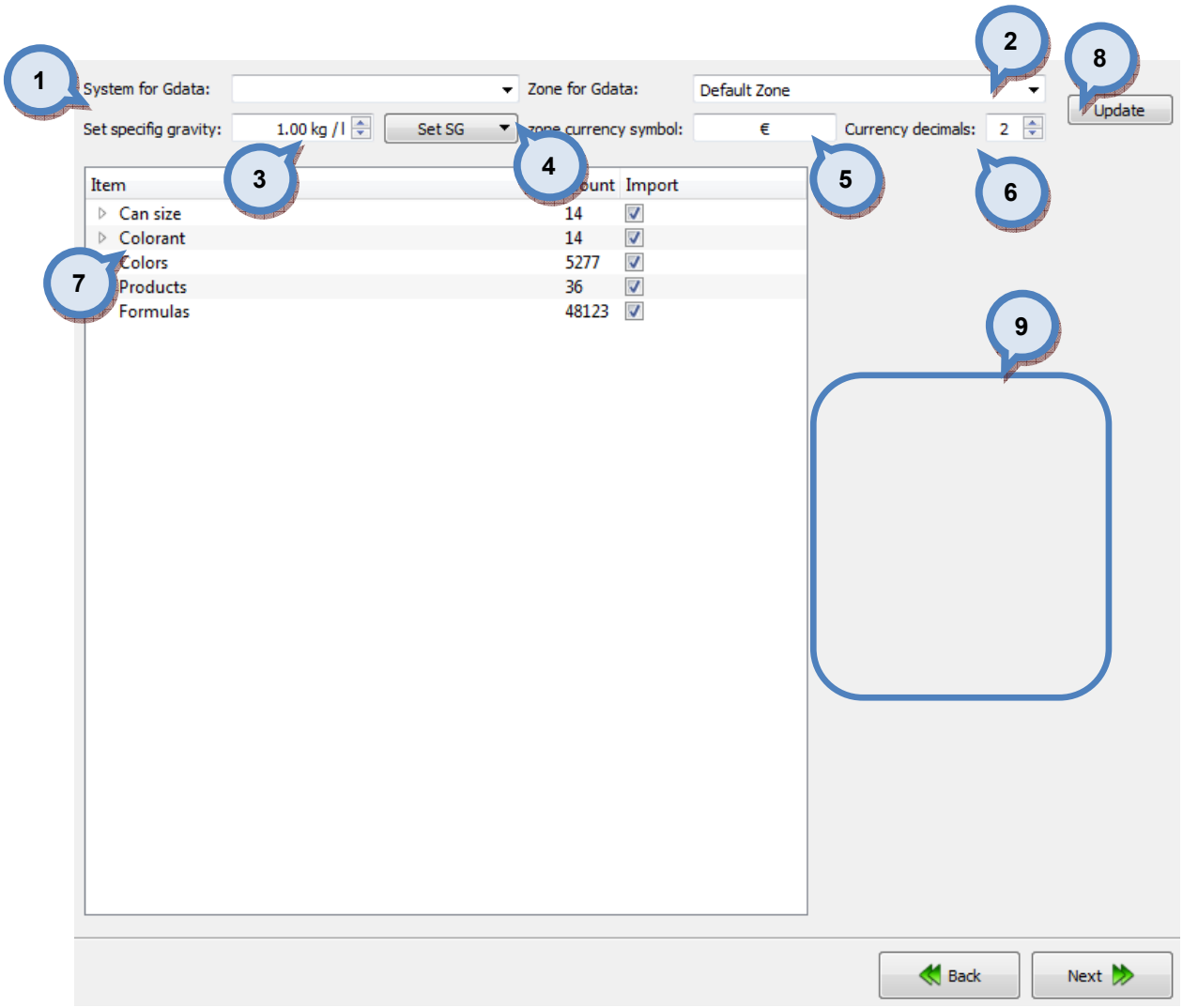
2.Use: When the radio button is selected the number in the selector field (3) is used as base paint filling level, when filling level is not specified for the base paint.

3.as base paint filling level of base paint amount: The number in the selector field is used as base paint filling level, when filling level is not specified for the base paint. (Radio button 2/4 has to be selected as 2.

4.Set base paint fill levels manually: When the radio button is selected, the base paint filling levels can be set manually into the column (5).

5.Base paint fill level: The column to display the filling levels of the base paints. To manually edit the filling levels, set radio button (4) and double click the column with the left mouse button.

Next window in the export wizard is: System for Gdata.



1.System for Gdata: The drop down list to select the system for the Gdata.

2.Zone for Gdata: The drop down list to select the zone for the Gdata.

3.Set specific gravity: The selector field to set a density for the items selected with button (4).

4.Set SG: The button (the drop down list opens up with the click) set specific gravity value set in field (3) to items:

-The colorants that are missing the specific gravity value.

-The all of the colorants.

-The base paints that are missing the specific gravity value.

-The all of the base paints.

5.currency symbol: The text field to enter a used currency symbol, like €, $,or £.

6.Currency decimals: The selector field to select how many decimals are used in the currency.

7.Items: The table to display all of the items: Can size, Colorant, Colors, Products, and Formulas. Click on the ► symbol to navigate to the lower levels on each of the items. Items which require attention are marked with red traffic light. Import will not succeed unless all areas fixed, use Update after the changes (8)

8.Update: The button to update items table (7) based on the selections on the previous fields.

9.Item details: The window section to display detailed items on each of items (7), when any one of them is selected (highlighted). When navigating into the lower levels on the items table (7), more item details are shown on the section (9). See further details about this one the following pages.

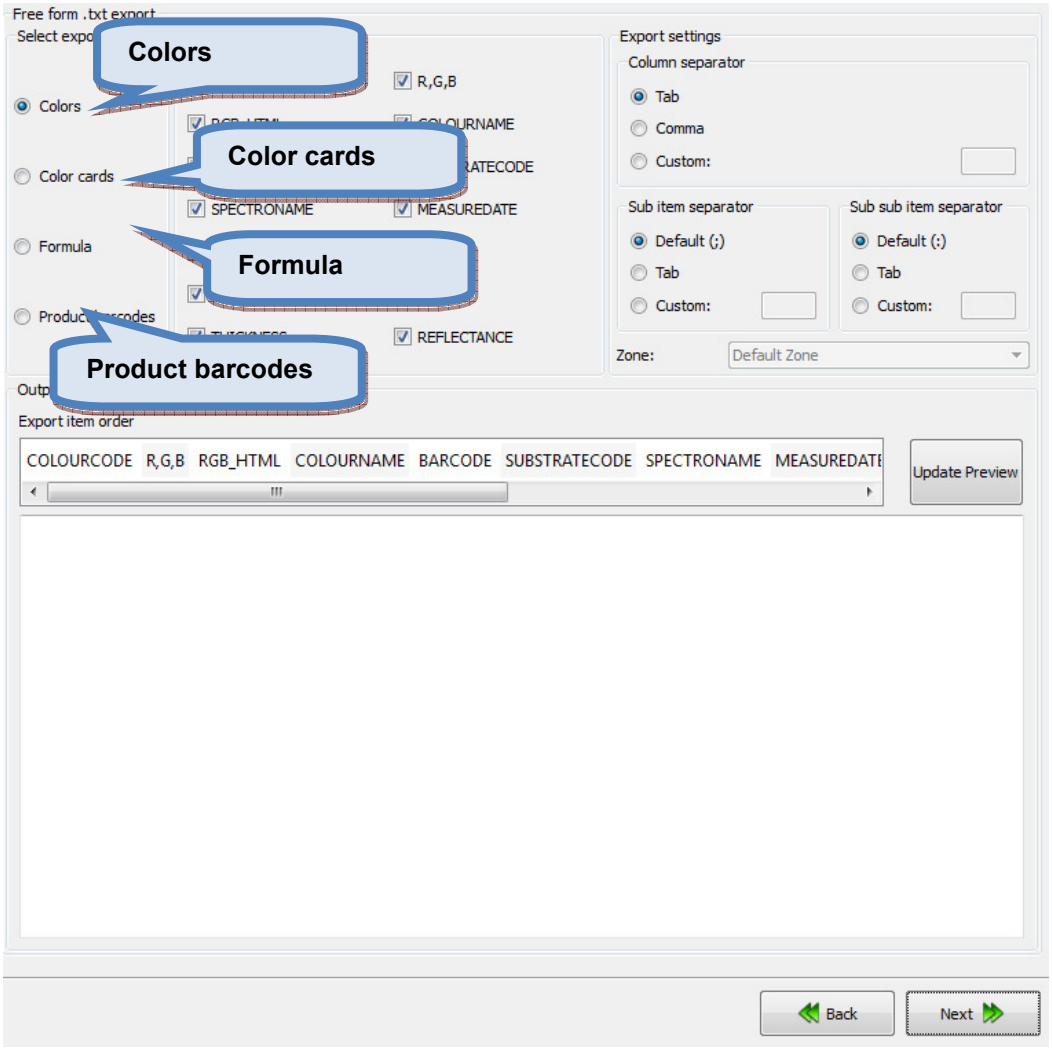
Selected item on the table (7)	Item details	Description
Can size	non	
One specific can size (e.g. 1000ml)	Can size code	Free text
"	Gravimetric	Check box, Enabled = True
"	Nominal amount	Millilitres
Colorants	Non	
One specific colorant (e.g. MS)	RGB	RGB (Color value) in 8 digit format.
"	SG (kg/l)	Specific gravity. Unit of measure is kg/litre.
"	VOC (g/l)	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
Colors	Non	
Products	non	
One specific product	Blended base code	Free text field
	Over fill	True = T or False = F
	VOC limit	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
One specific base paint	Abstract base code	Free text field
	Base code	Free text field
	Multiply	Number between 1- 999999999
	Max fill	Number between 0 – 1, when 0.1= 10%
	Min fill	Number between 0 – 1, when 0.1= 10%
	Nominal fill	Number between 1- 999999999
	SG (kg/l)	Specific gravity. Unit of measure is kg/litre.
	Top off	True = T or False = F
	VOC (g/l)	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
Formulas	Non	
One specific base paint	Base amount	
	Base code	Free text
	Multiply	Number between 1- 999999999

Note:Input the required information into the field with Red, before proceeding.

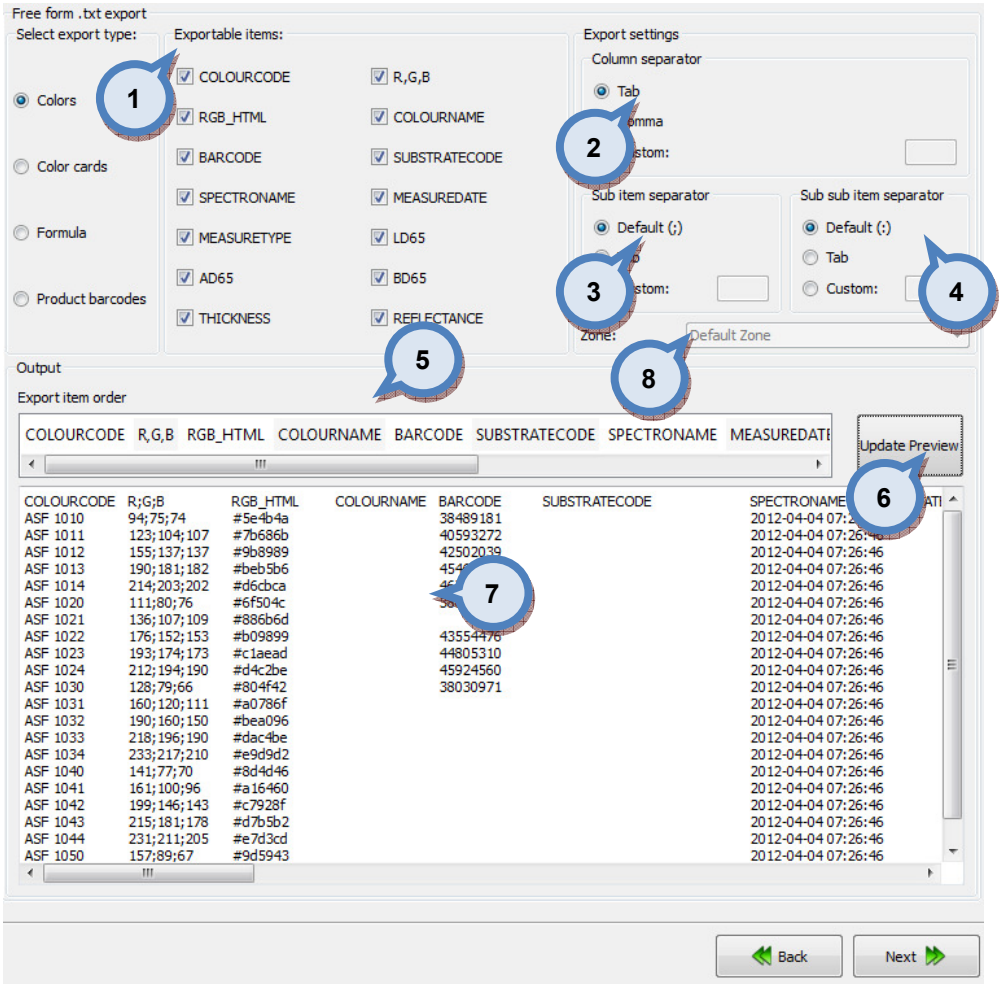
Next window in the export wizard is: Free form .txt export

In the **Free from .txt export** page, you have four export options: colors, color cards, formula, and product barcodes.

NOTE: **Only the items that are present in the gdata can be exported. Below pages presents all the options even they are not necessarily available.**



When **Colors** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

COLOURCODE: The name or code of the color

RGB_HTML: The RGB values of the color in the HTML format

BARCODE: The bar code of the color.

SPECTRONAME: The name of the spectrophotometer

MEASURETYPE: The measurement type. See measurement type options below.

AD65: The a* component of the color values when using D65 light source.

THICKNESS: The thickness of the draw down used in the measurements.

R,G,B: The colour values with R, G, B units.

COLOURNAME: The name of the colour.

SUBSTRATECODE: The substrate code.

MEASUREDATE: The date of the measurement.

LD65: The L* component of the color values when using D65 light source.

BD65: The b* component of the color values when using D65 light source.

REFLECTANCE: The reflectance values.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

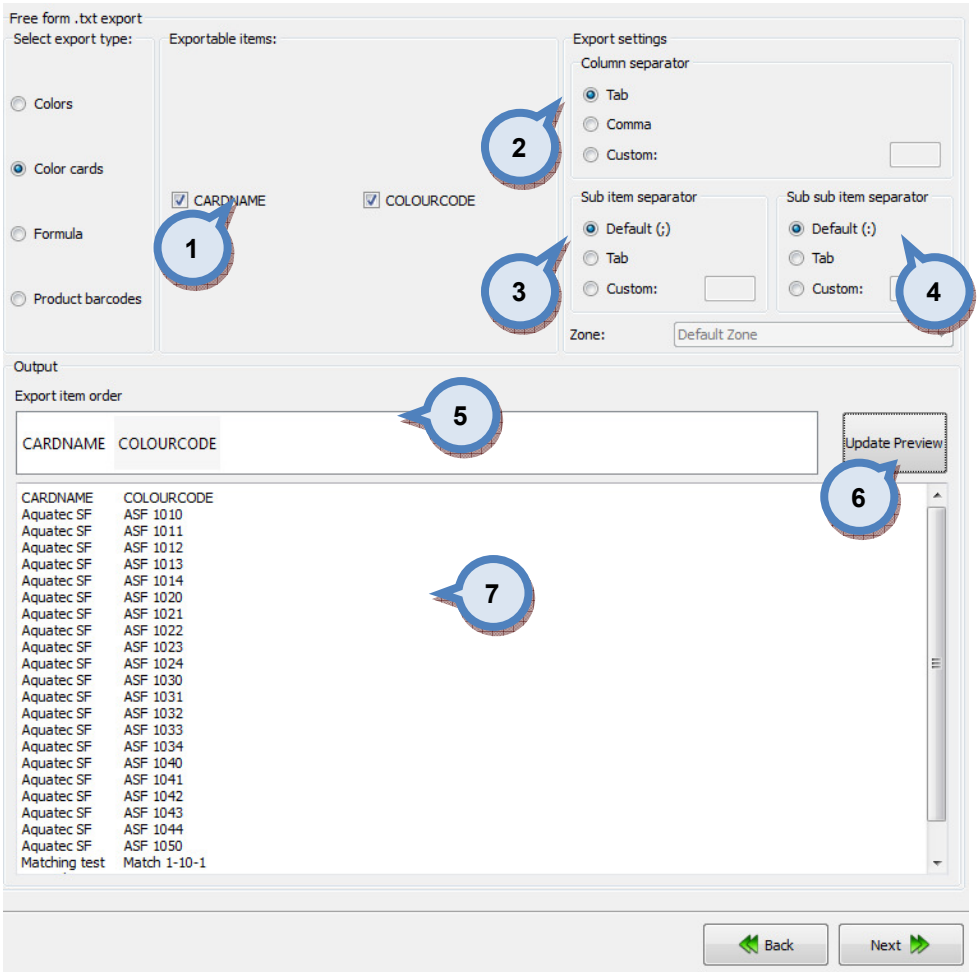
6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

8.ZONE: Dropdown list to select zone

Next window in the export wizard is: Color card renaming

When **Color cards** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

CARDNAME: The name or code of the color card.

COLOURCODE: The name or code of the color.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

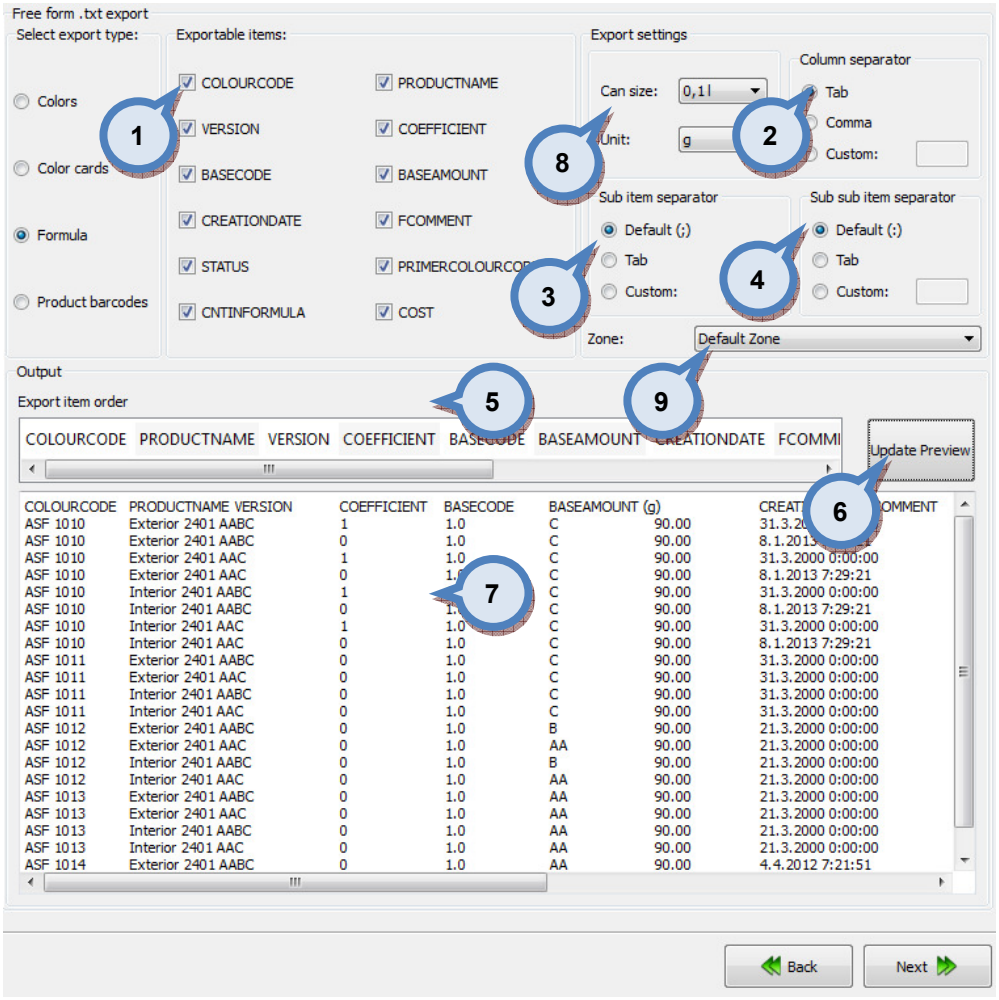
5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

Next window in the export wizard is: Color card renaming.

When **Formula** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

COLOURCODE: The color code.

VERSION: The version number or name of the formula.

BASECODE: The base code.

CREATIONDATE: The formula creation date.

STATUS: The formula status.

CNTINFORMULA: The component (the colorant or the base paint) in the formula.

PRODUDUCTNAME: The product name.

COEFFICIENT: The number used to multiply the formula.

BASEAMOUNT: The base amount in the formula.

FCOMMENT: The formula comment.

PRIMERCOLORCODE: The code of the primer color.

COST: Cost of the formula.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

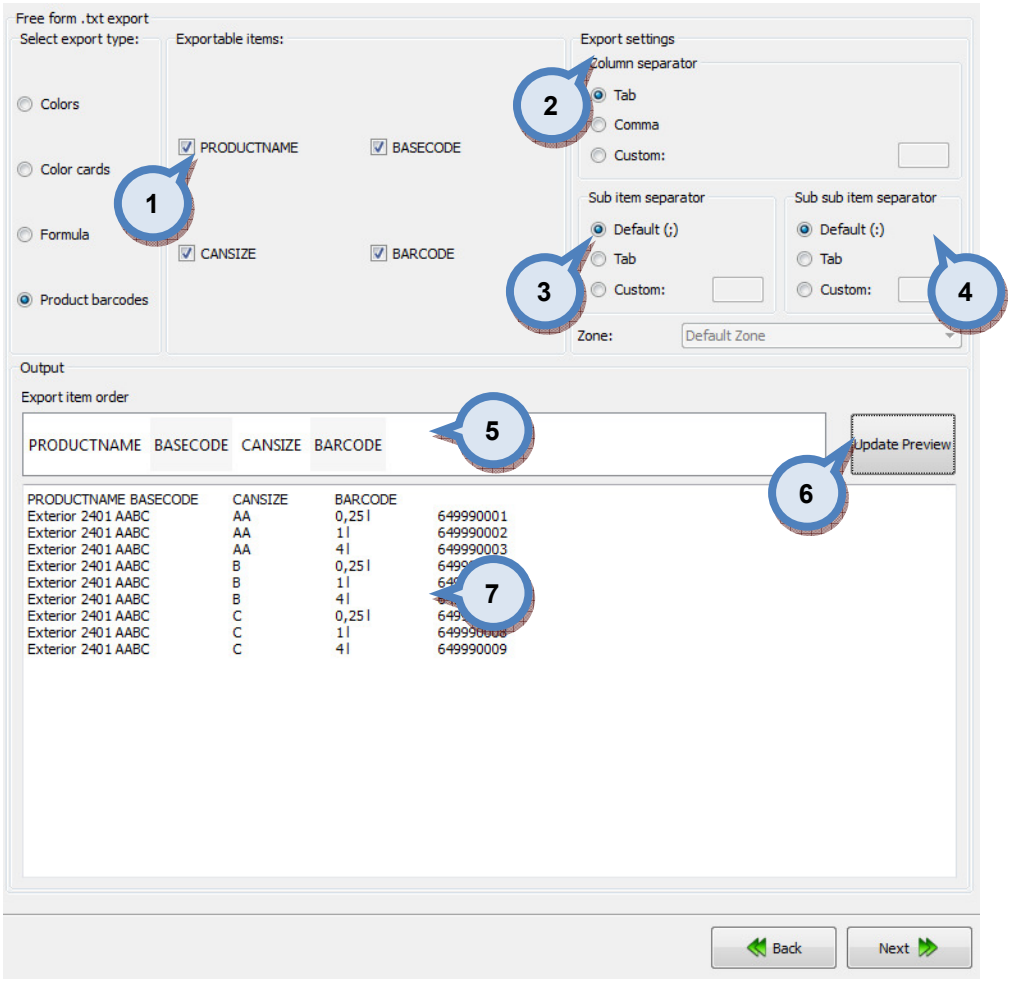
7.OUTPUT: The preview window of the exported data.

8.CANSIZE and UNIT: Dropdown list to select output format.

9.ZONE: Dropdown list to select zone.

Next window in the export wizard is: Color card renaming.

When **Product barcodes** radio button is selected on the **Free from .txt export** page, you have the following options:



1.Exportable items: When the check boxes are enabled, the corresponding items are included into the export. Options are:

PRODUCTNAME: The product name.

CANSIZE: The can size.

CASECODE: The base paint code.

CARCODE: The bar code.

2.EXPORT SETTINGS/COLUMN SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

3.EXPORT SETTINGS/SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

4.EXPORT SETTINGS/SUB SUB ITEM SEPARATOR: The separator for each of the columns are selected with the radio buttons. The options are: default(;), tab, and custom or freely selected character.

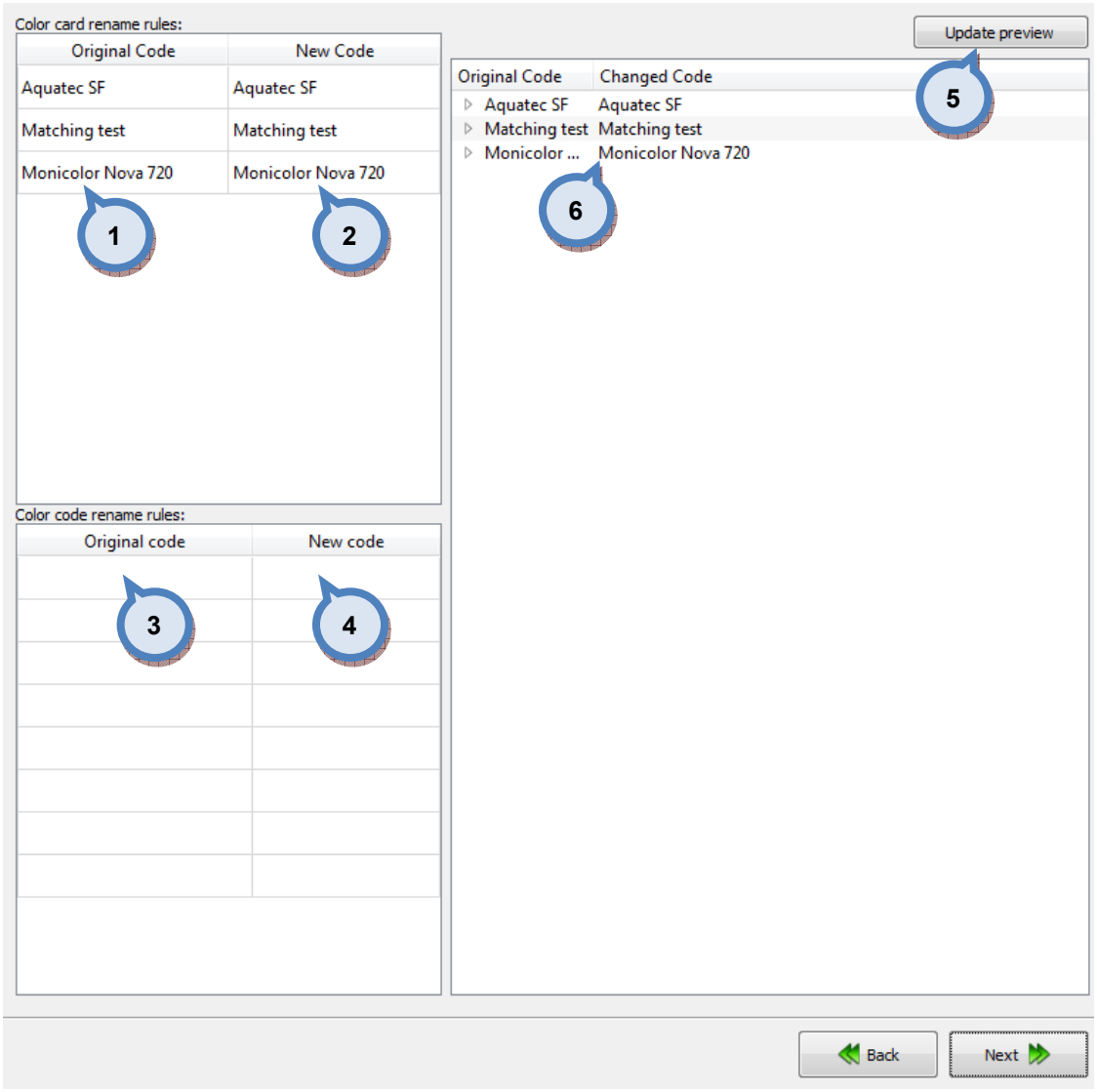
5.EXPORT ITEM ORDER: The view of the order of the items to be exported. The order of the items can be changed by drag-and-drop procedure.

6.UPDATE PREVIEW: The button to update the view on section (7) after selecting the items on the section (1).

7.OUTPUT: The preview window of the exported data.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

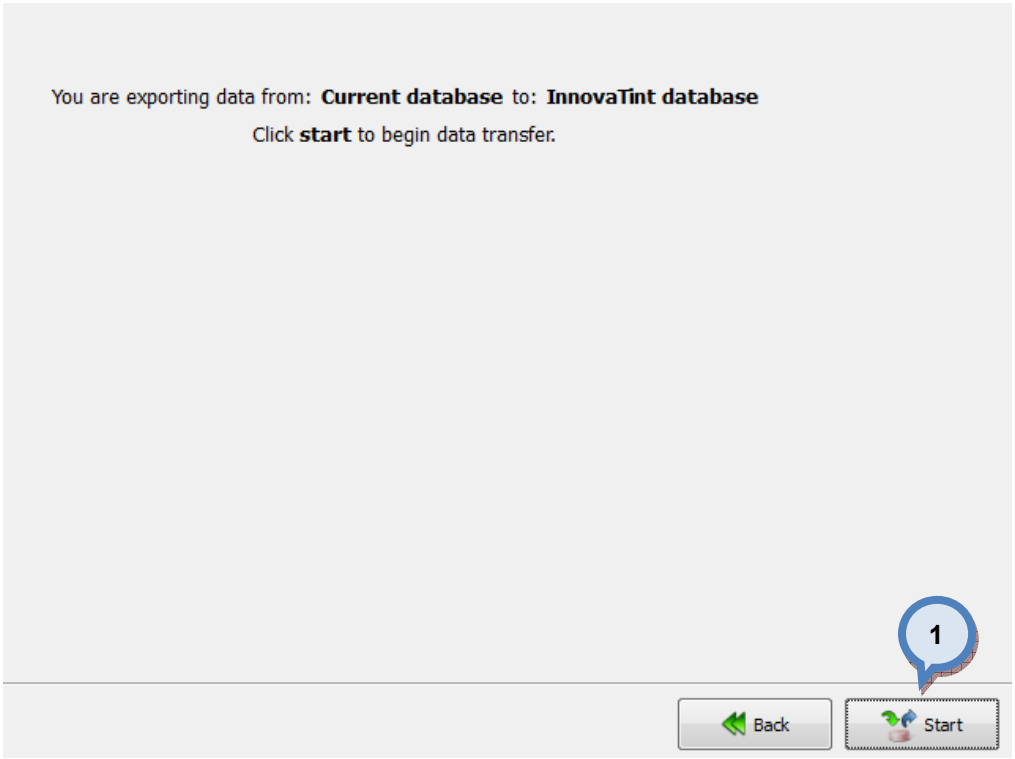
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

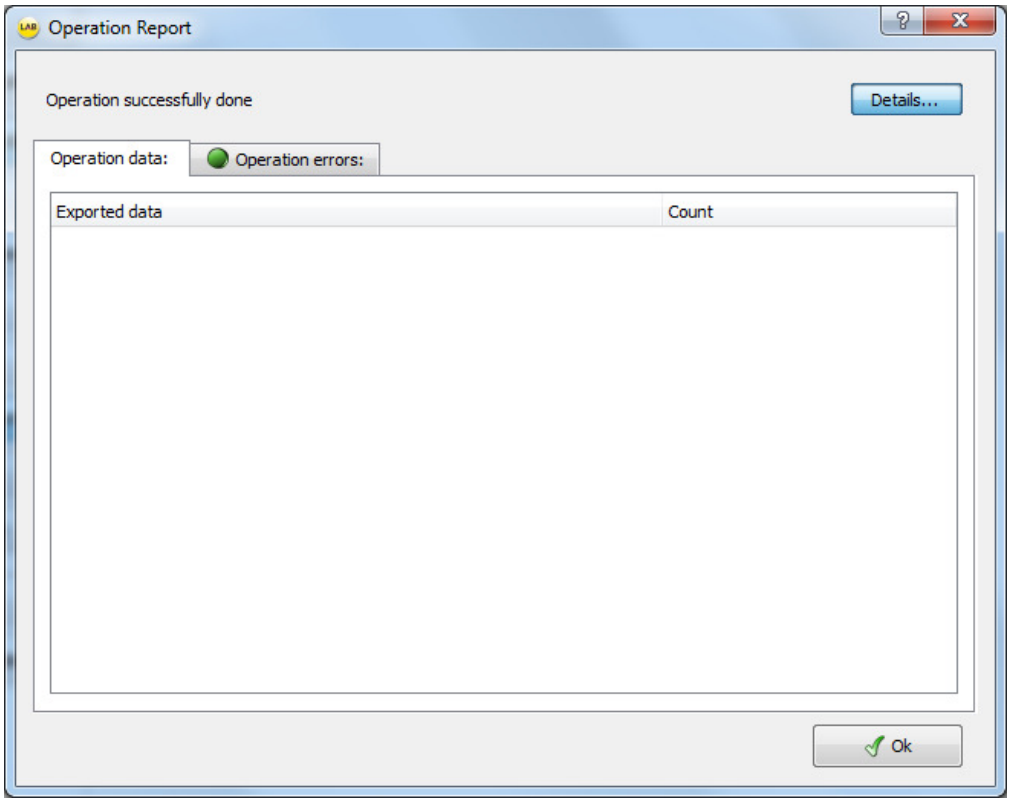
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:



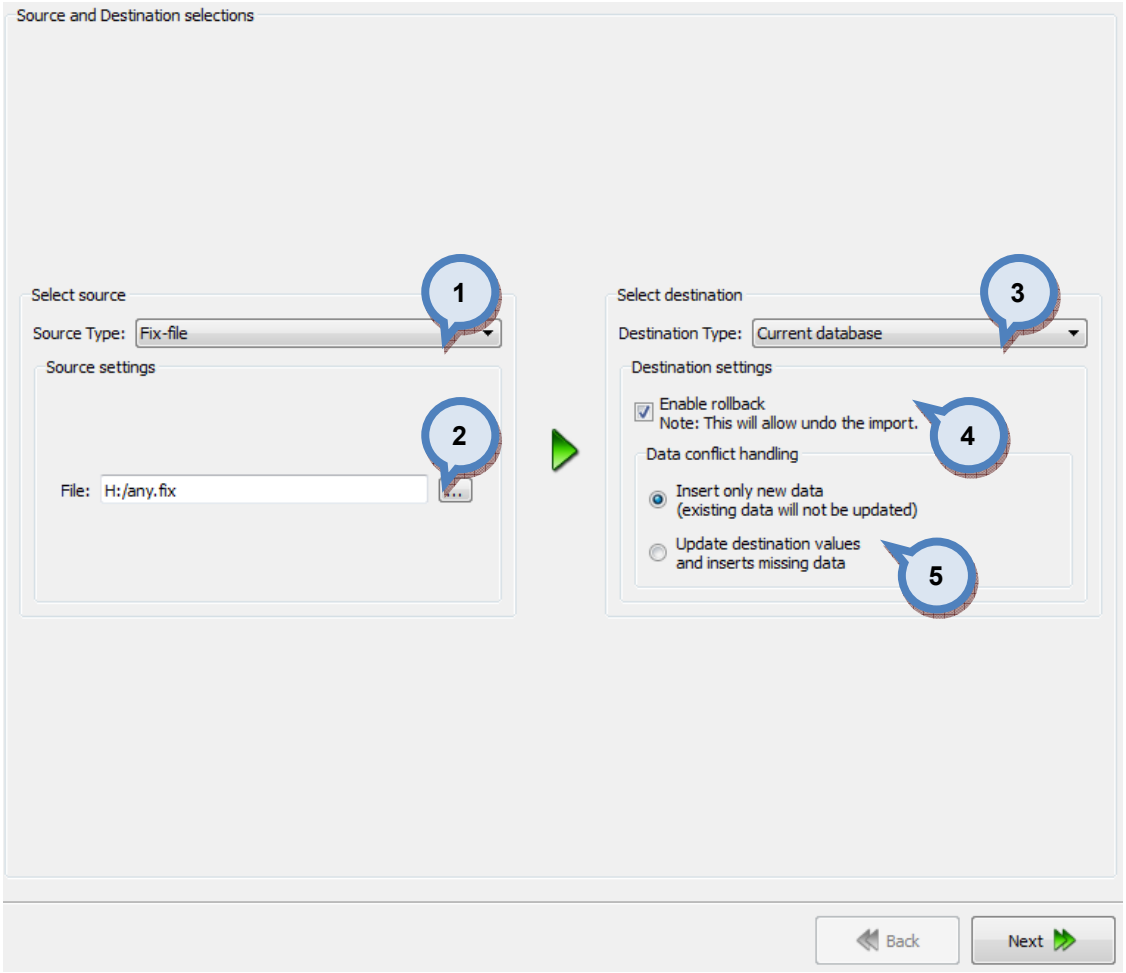
1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



4.5.11 Export from fix-file into the current database

When **fix file** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Source type: The drop down list to select a source database type.

2.File: The text field to input the file and the folder for the destination file. Use button to browse for a file.

3.Destination type: The drop down list to select a destination database type.

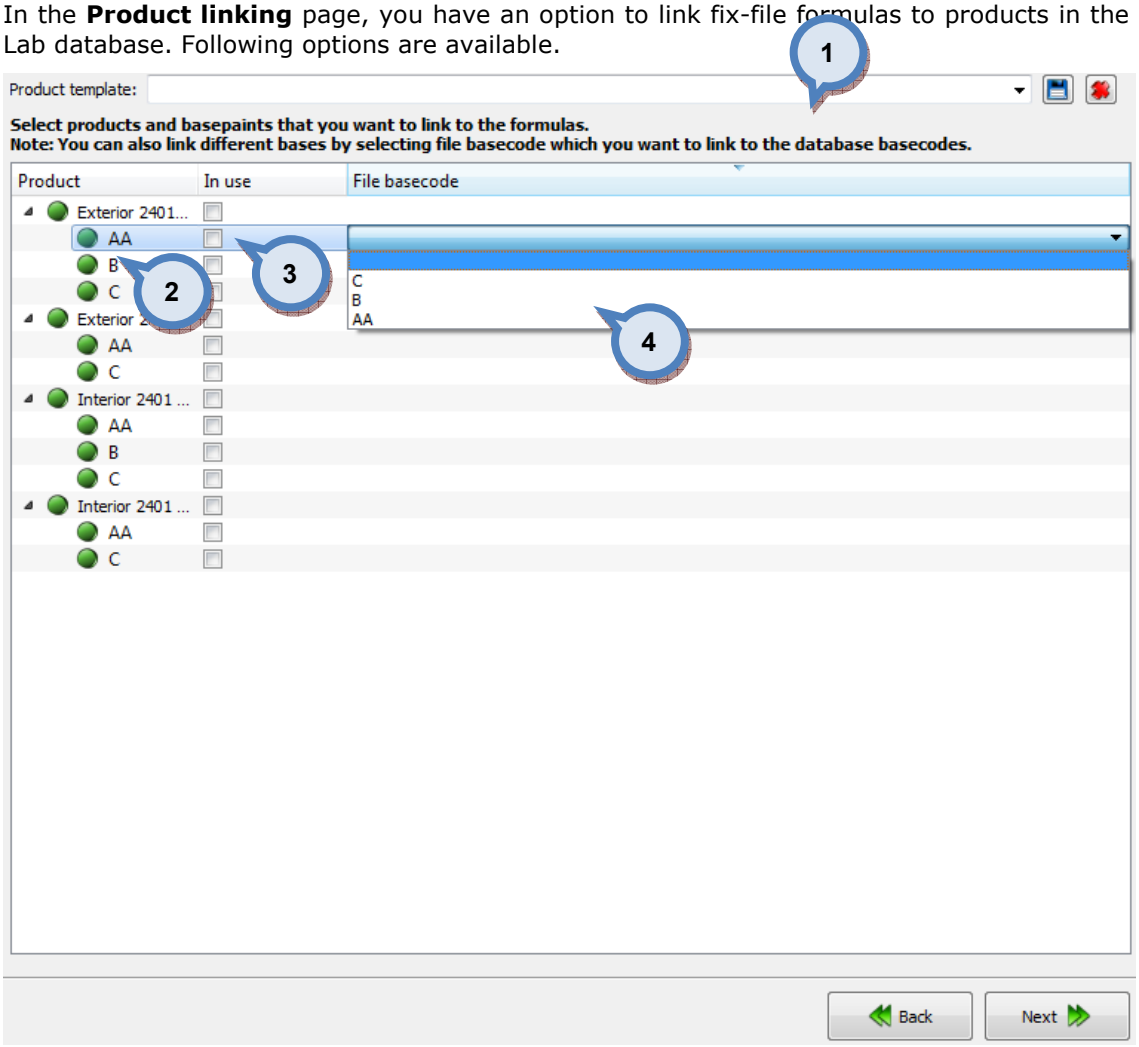
4.Enable rollback: When the check box is enabled, the previous database can be restored.

5.Dataconflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

Next window in the export wizard is: Product linking.

Note: The destination database must have the products set correctly before importing the data from the text file.

In the **Product linking** page, you have an option to link fix-file formulas to products in the InnovaTint Lab database. Following options are available.



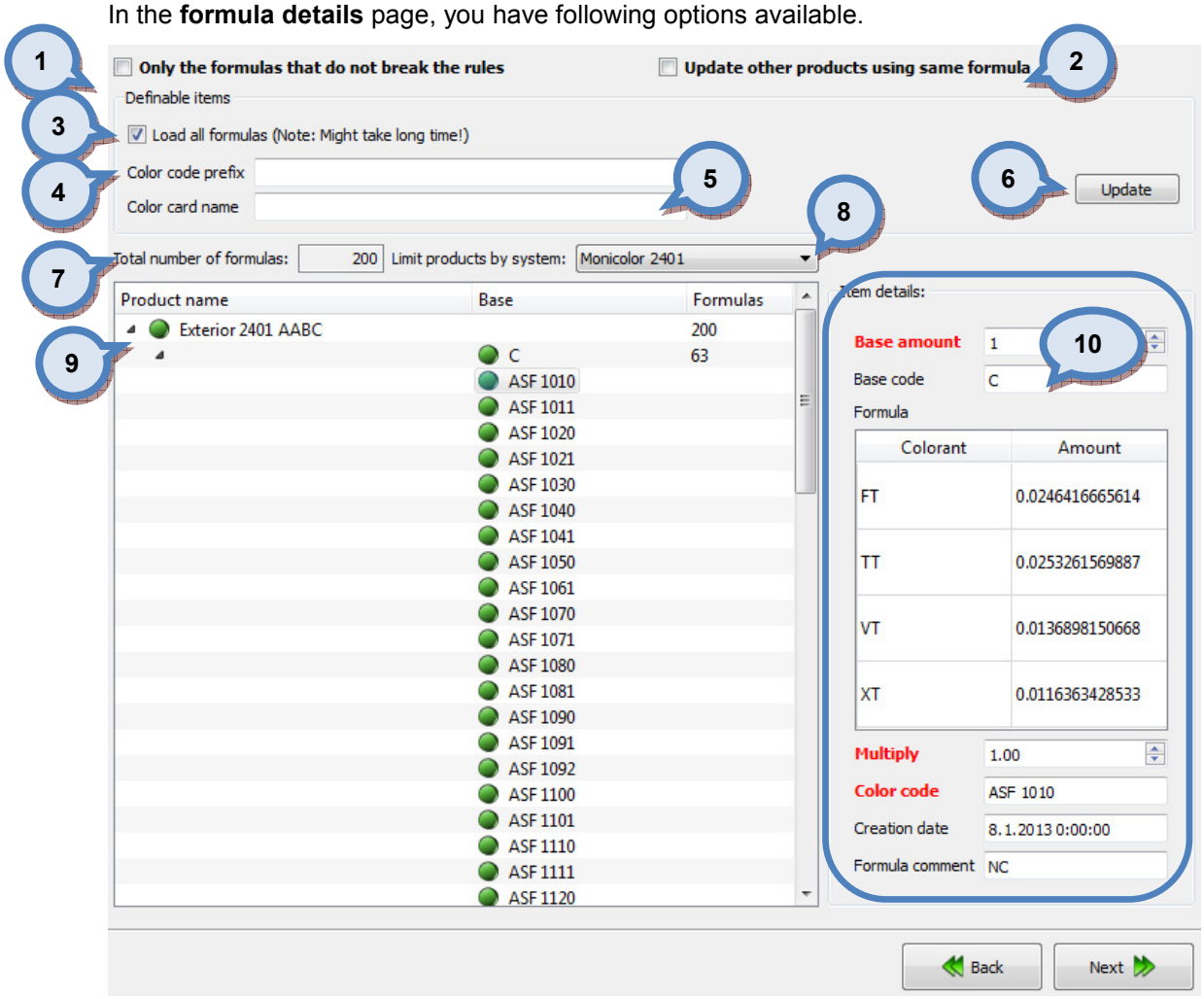
1.Product template: The button to start the export process.

2.Product: List of available products. Suitable products marked with green traffic light, others with red.

3.In use: If check box enabled, fix-file formulas transferred to it.

4.File basecode: List of base codes from the fix-file. Option to link unmatching codes together, for example, db code 'AA' = file basecode 'B'.

In the **formula details** page, you have following options available.



1. Only the formulas that do not break the rules: If the check box is enabled, only valid formulas get imported, see more information **Matching rules** area.

2. Update other products using same formula: If the check box is enabled all products using the updated formula will get the same.

3.Load all formulas: If Check box is enabled and Update button (6) pressed, Items table (9) will be populated with all data, else only fraction to check validity.

4.Color code prefix: Free text field to add text (prefix) on to color code

5.Color card name: Free text field to input color card name (if the color doesn't already belong to any).

6.Update: The button to update items table (9) based on the selection/changes on the other fields.

7.Total number of formulas: Number of formula to be imported

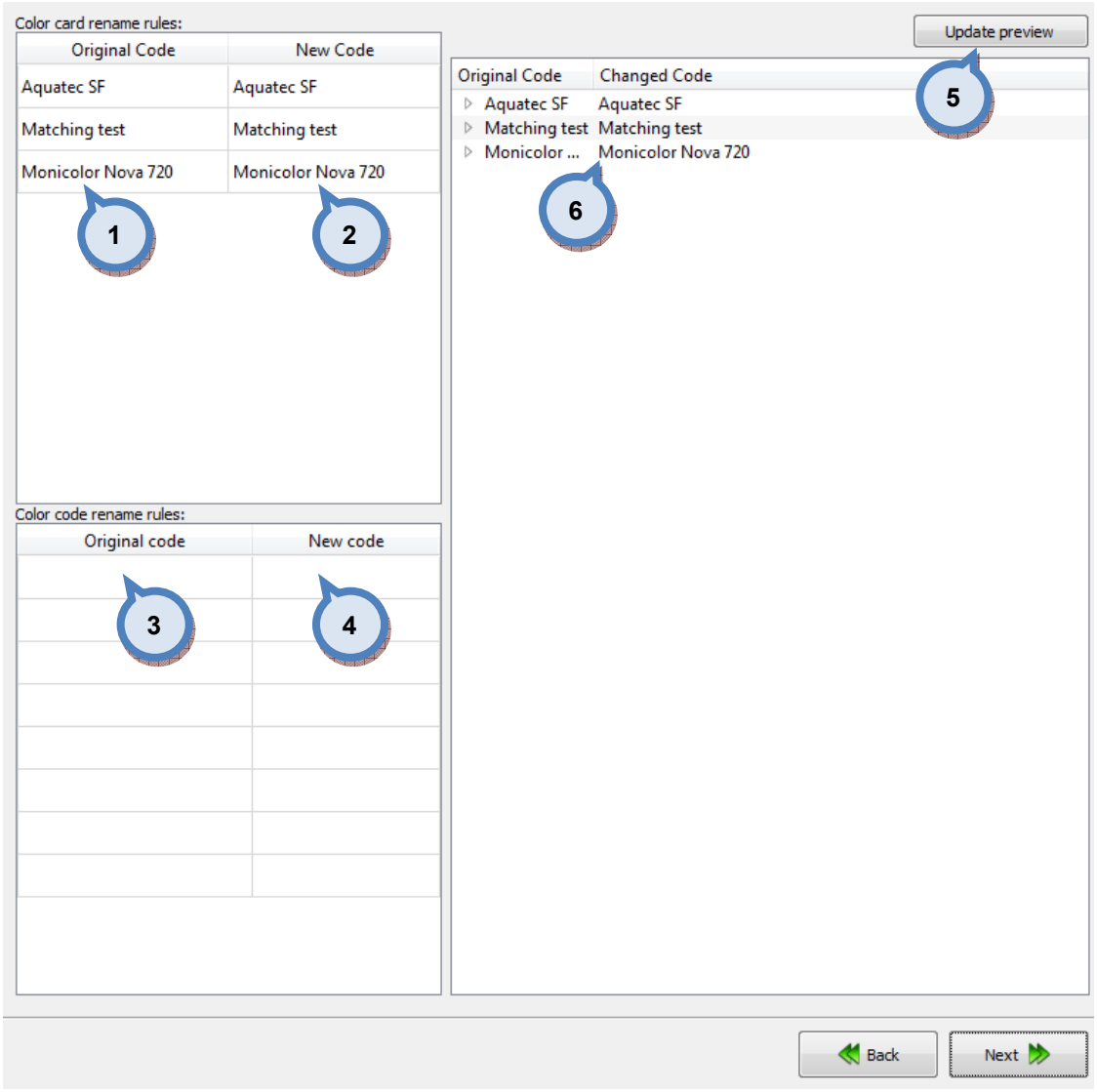
8.Limit products by system: A dropdown list to select system.

9.Items: The table to display fix-file main items; Product, base and color codes. Click on the ► -symbol to navigate to the lower levels on each item. Items which require attention are marked with red traffic light. Import will not succeed unless all the areas are fixed, use update after the changes (6)

10.Item details: The window section to display detailed items on each of items (9), when any one of them is selected (highlighted). When navigating into the lower levels on the items table (7), more item details are shown on the section (10). See further details about this one the following pages.

Selected item on the table (9)	Item details	Description
Product	Blended base code	Free text field
	Info page	Free text field
	Over fill	True = T or False = F
	Top off	True = T or False = F
	VOC limit	Amount of volatile organic compounds (or solvents). Unit of measure is grams/litre.
Base	Abstract base code	Free text field
	Base amount	millilitres
	Base code	Free text field
	Multiply	Number
	Nominal fill	Number between 1-9999999
	SG (kg/l)	Specifc gravity. Unit of measure is kg/litre
Single formula	Base amount	millilitres
	Base code	Free text field
	Formula	
	Multiply	Number between 1-9999999
	Color Code	Free text field
	Creation date	date
	Formula comment	Free text field

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

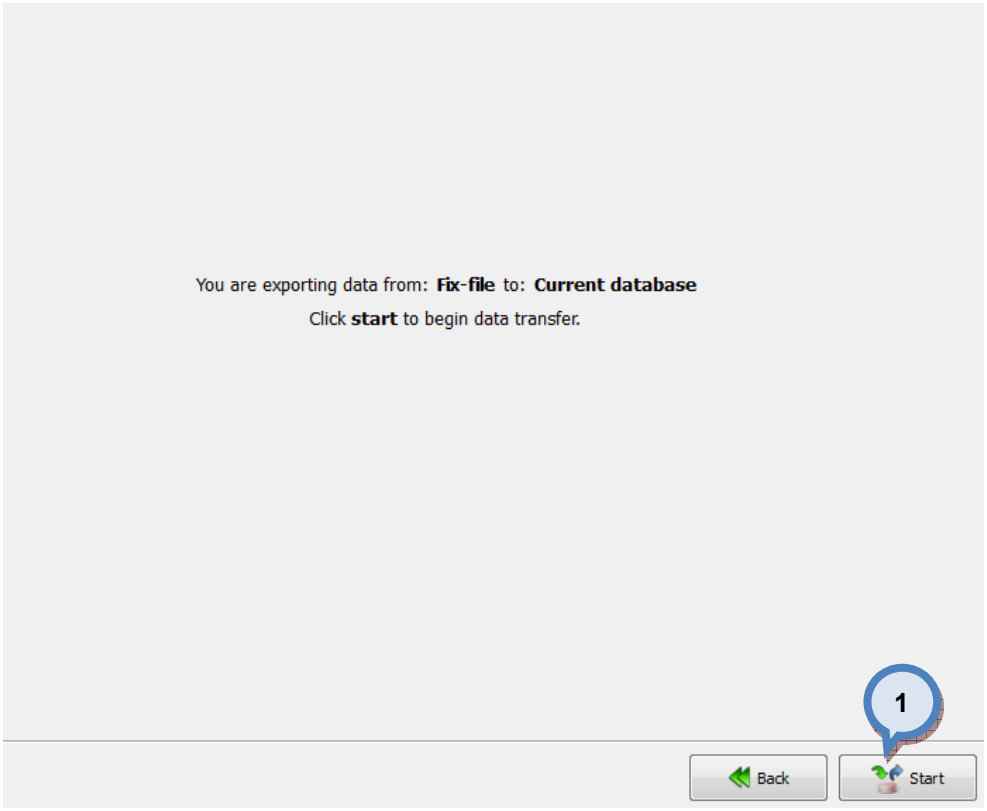
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

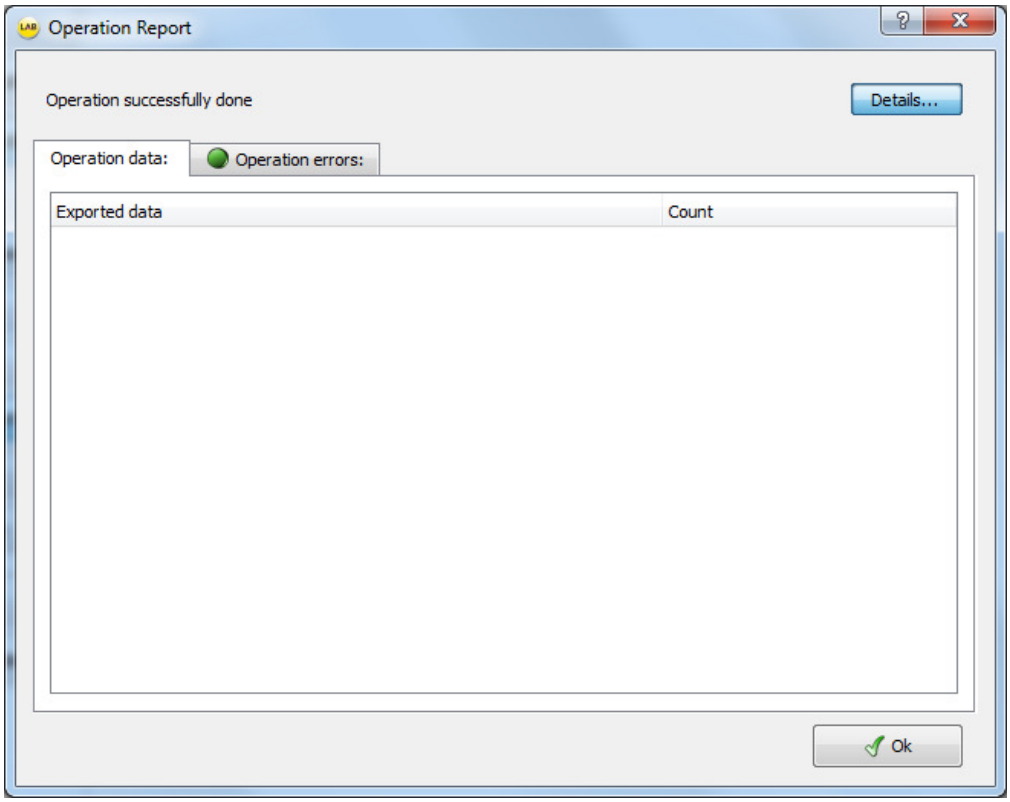
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:

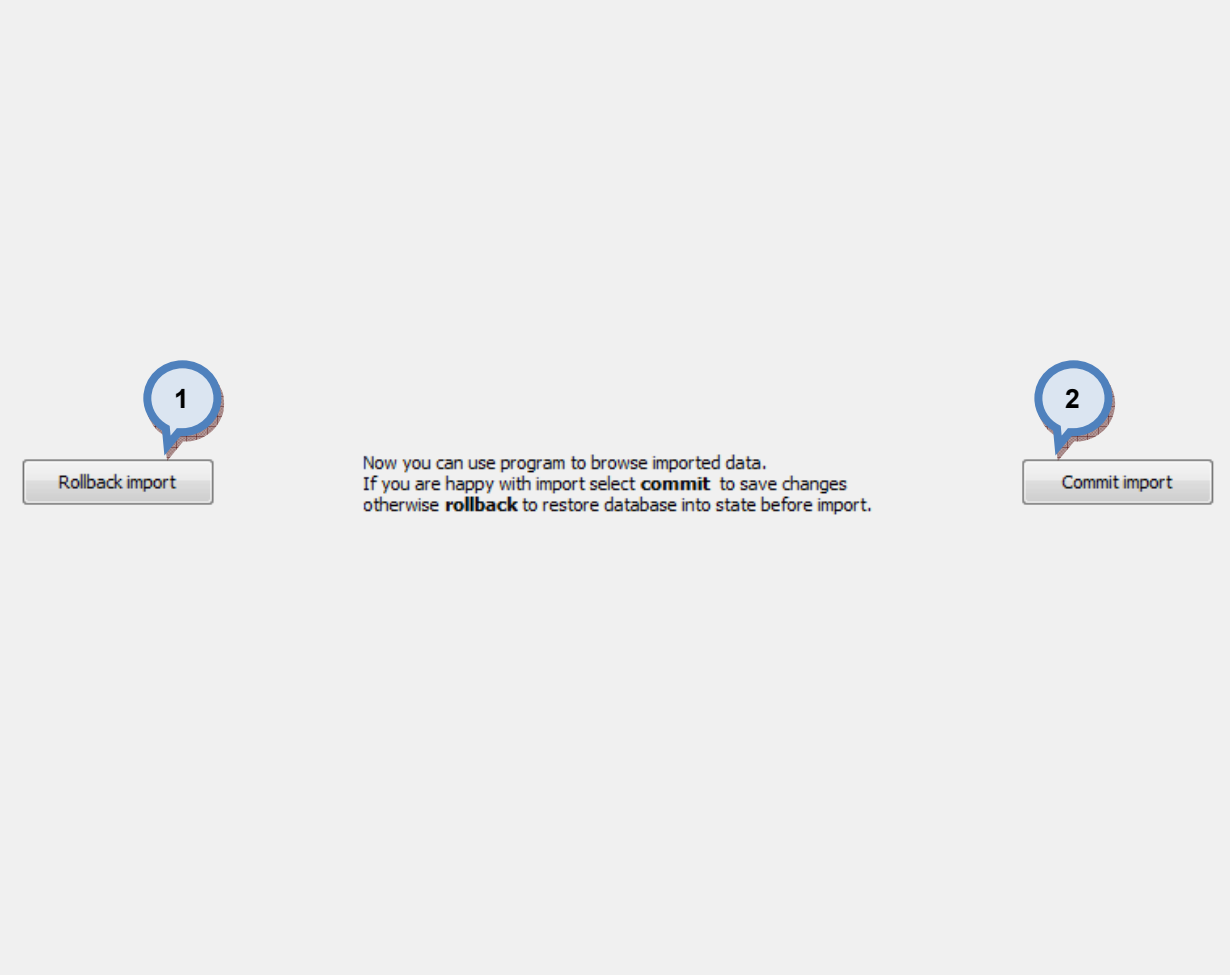


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



In the **Commit import** page, you have the following options:

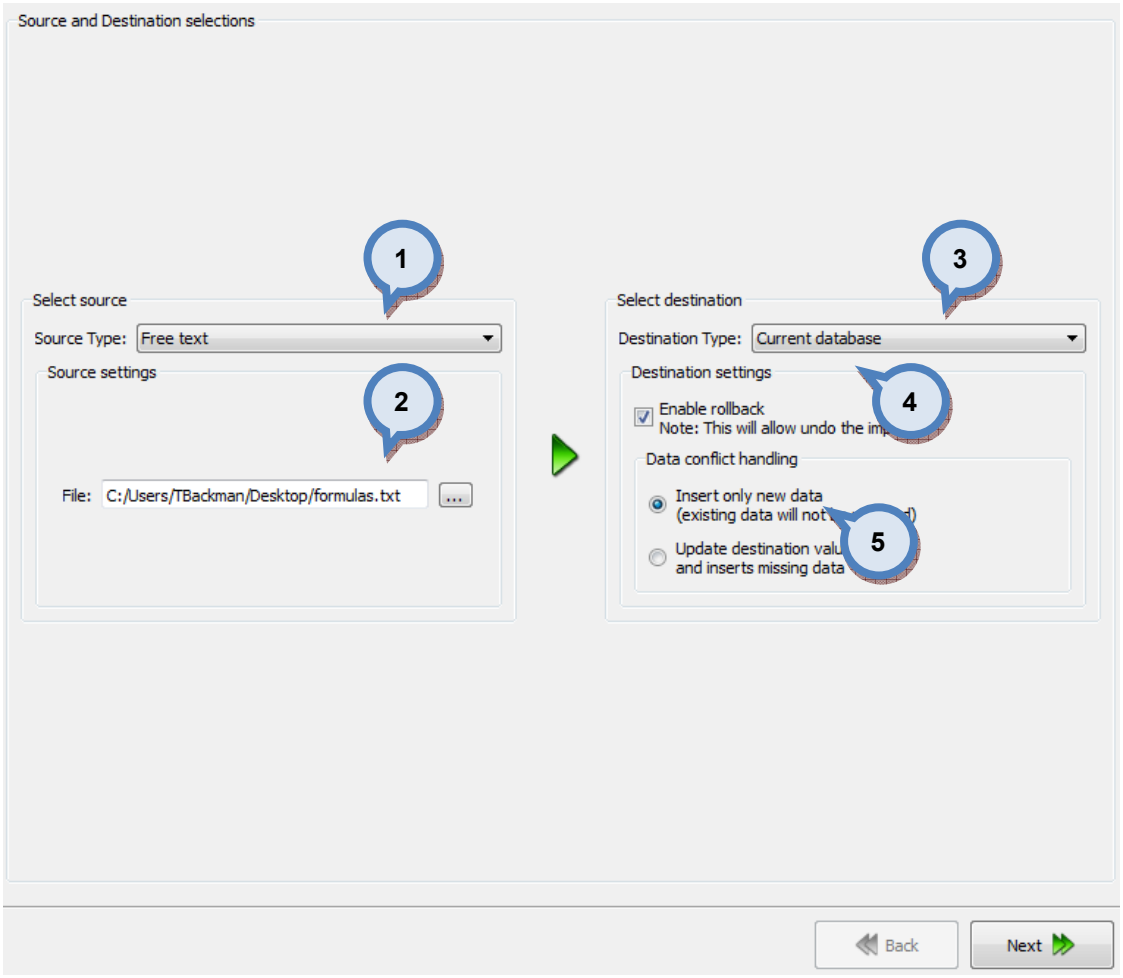


1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

4.5.12 Export from free text into the current database

When **free text** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Source type: The drop down list to select a source database type.

2.File: The text field to input the file and the folder for the destination file. Use button to browse for a file.

3.Destination type: The drop down list to select a destination database type.

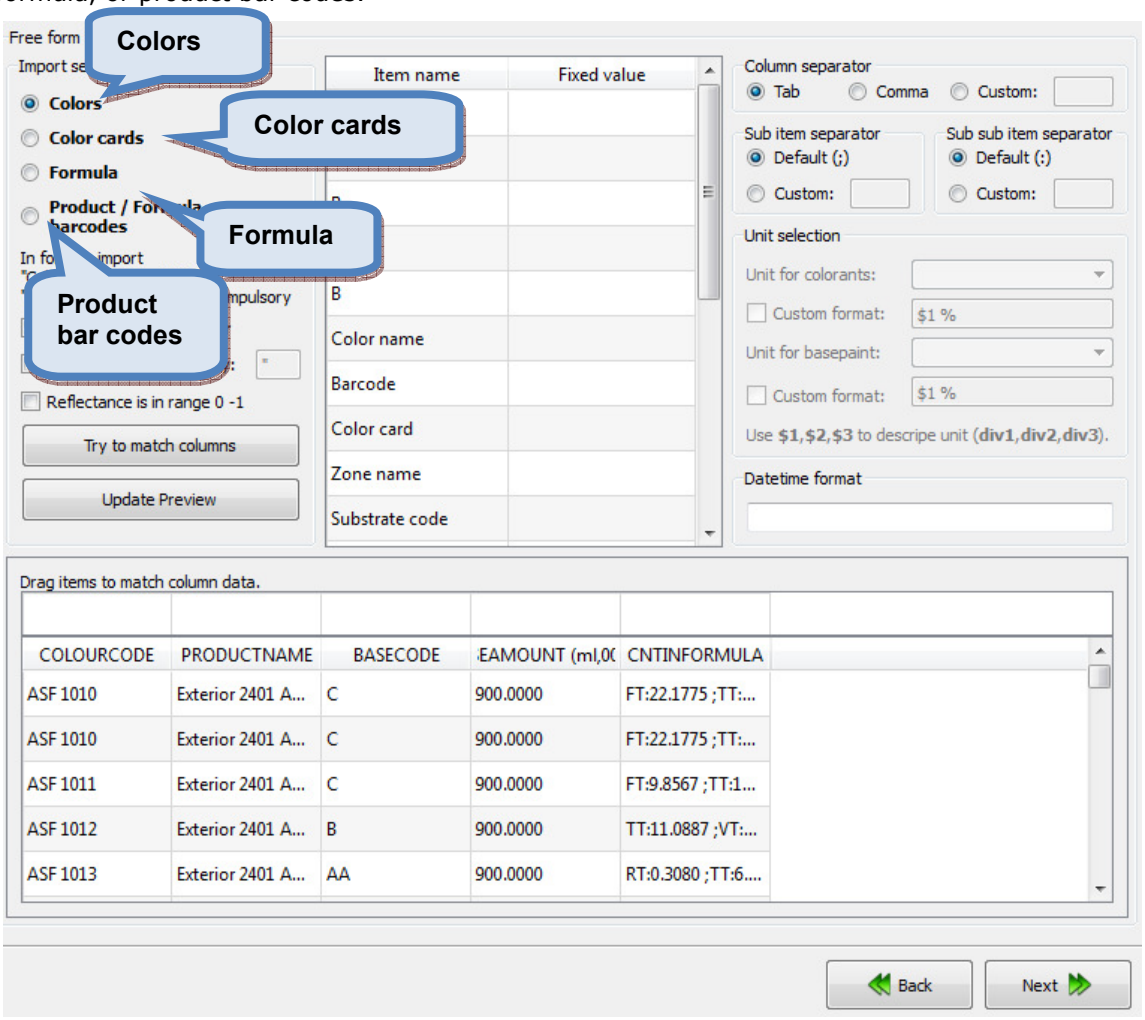
4.Enable rollback: When the check box is enabled, the previous database can be restored.

5.Dataconflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

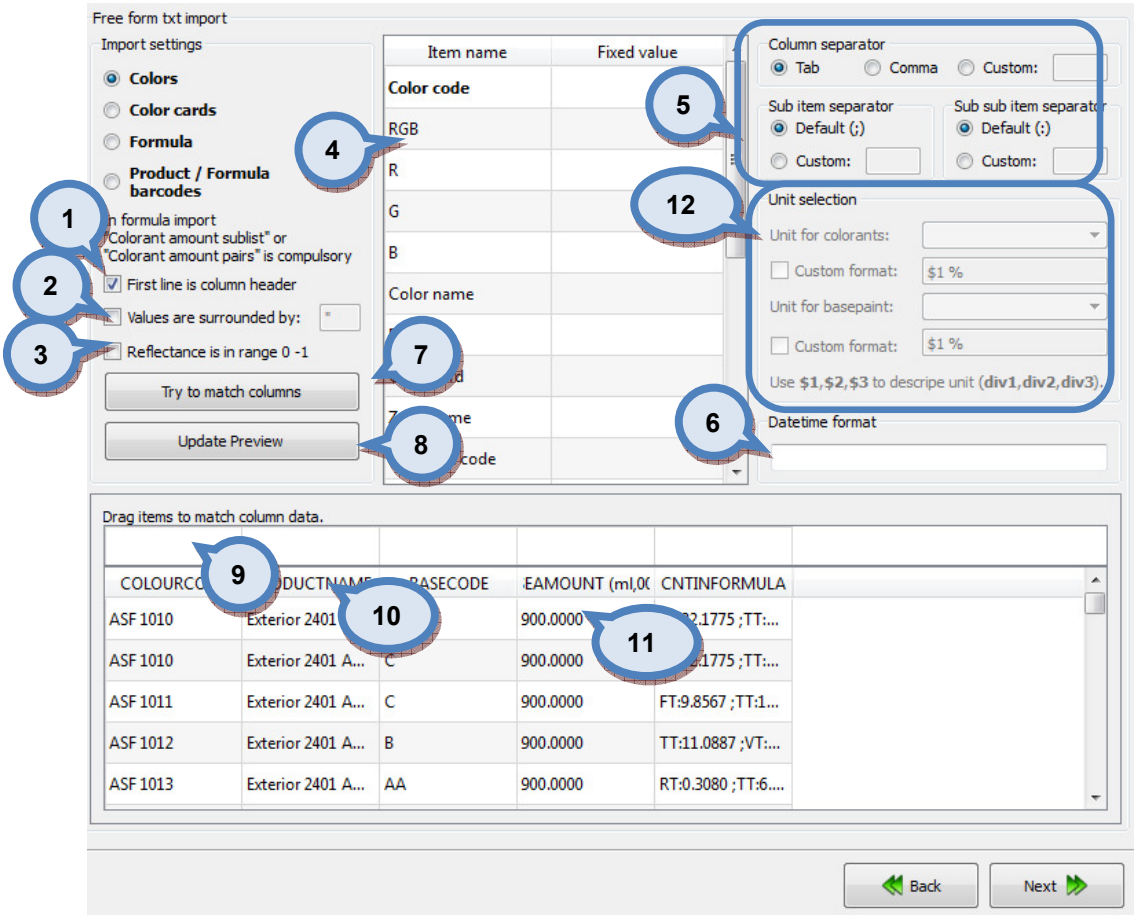
Next window in the export wizard is: Free form txt import.

Note: The destination database must have the products set correctly before importing the data from the text file.

In the **Free form txt import** page, you have the option to import 4 items: colors, color cards, formula, or product bar codes.



In the **Free form txt** import page, you have the following options available:



1.First line is column header: When check box is enabled, the first row in the text file is assumed to contain a column headers.

2.Values are surrounded by: When check box is enabled, the values are assumed to be surrounded by the character displayed in the text box in the right. Default value is ".

3.Reflectance is in range 0-1: When check box is enabled, the reflectance values are assumed to be between 0-1. Typically, the color reflectance values are in values between 0 and 100%, but some software are using values between the number 0 and 1, when 0% = 0, and 100% = 1.

4.Item name/Fixed value: The list of items on the destination database. If fixed value is needed, input value into the Fixed value column.

5.Column separator: The separator for each of the columns are selected with the radio buttons. The options are: tab, comma, and custom or freely selected character.

6.Datetime format: The text field to define format to display the date and the time. To see format options, hold cursor on the top of the field, or see next page for further information.

7.Try to match columns: The button to try to match column from the text file into the database format. Result can be viewed on the headers on the table (8). Note: you can drag-and-drop the field header to match the correct format.

8.Update view: The button to update the view on table headers (9) base on the column separator settings on the item (5).

9.The table headers in the destination database.

10. The table headers in the source file.

11. The table of data.

12.Unit selection: The unit for colorants and bases can be set here. Dropdown lists have the units defined in the units area, see configuration, alternatively a custom 'temporary' format may be created,

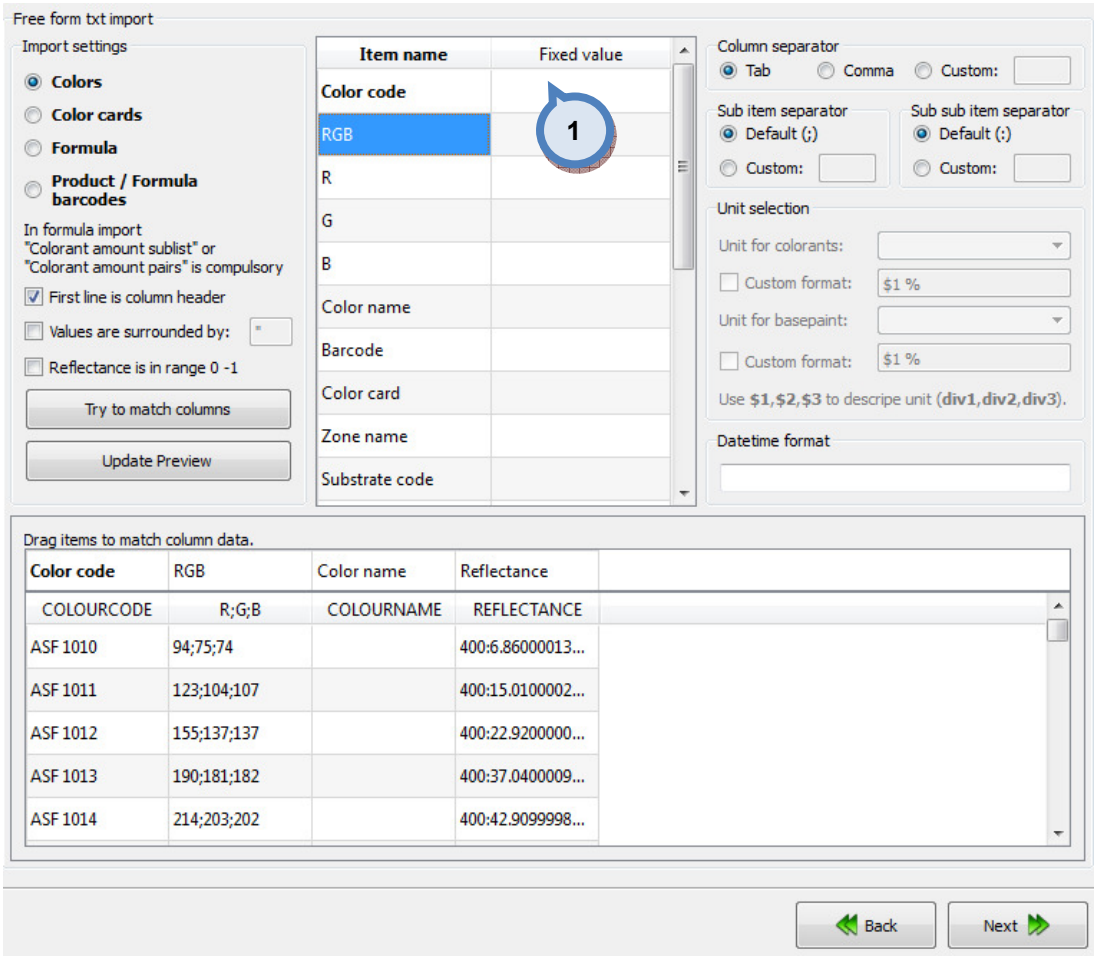
Next window in the export wizard is: Definable items.

Note: If headers do not automatically match when using Try to match columns button, you can drag and drop headers from the list (4) into the header section (9).

The **Date time format** options:

Directive	Meaning
%a	Locale's abbreviated weekday name.
%A	Locale's full weekday name.
%b	Locale's abbreviated month name.
%B	Locale's full month name.
%c	Locale's appropriate date and time representation.
%d	Day of the month as a decimal number [01,31].
%f	Microsecond as a decimal number [0,999999], zero-padded on the left
%H	Hour (24-hour clock) as a decimal number [00,23].
%I	Hour (12-hour clock) as a decimal number [01,12].
%j	Day of the year as a decimal number [001,366].
%m	Month as a decimal number [01,12].
%M	Minute as a decimal number [00,59].
%p	Locale's equivalent of either AM or PM.
%S	Second as a decimal number [00,61].
%U	Week number of the year (Sunday as the first day of the week) as a decimal number [00,53]. All days in a new year preceding the first Sunday are considered to be in week 0.
%w	Weekday as a decimal number [0(Sunday),6].
%W	Week number of the year (Monday as the first day of the week) as a decimal number [00,53]. All days in a new year preceding the first Monday are considered to be in week 0.
%x	Locale's appropriate date representation.
%X	Locale's appropriate time representation.
%y	Year without century as a decimal number [00,99].
%Y	Year with century as a decimal number.
%z	UTC offset in the form +HHMM or -HHMM (empty string if the the object is naive).
%Z	Time zone name (empty string if the object is naive).
%%	A literal '%' character.

When the **Colors** radio button is selected on the **Free form txt** import page, you have the following options available:



1.Table of items:

Color code:

RGB = R, G, and B values in one cell, separated by ; character.

R = R (red) value.

B = B (blue) value.

G = G (green) value.

Color name =

Barcode =

Color card =

Zone name =

Substrate code =

Spectro =

Measure date =

Measure type =

LD65 =

AD65 =

BD65 =

Thickness =

Reflectance = The reflectance values in one cell. Format: 400:reflectance value;420:reflectance value;440:reflectance value;etc. Starting from wavelength 400 with 20nm interval.

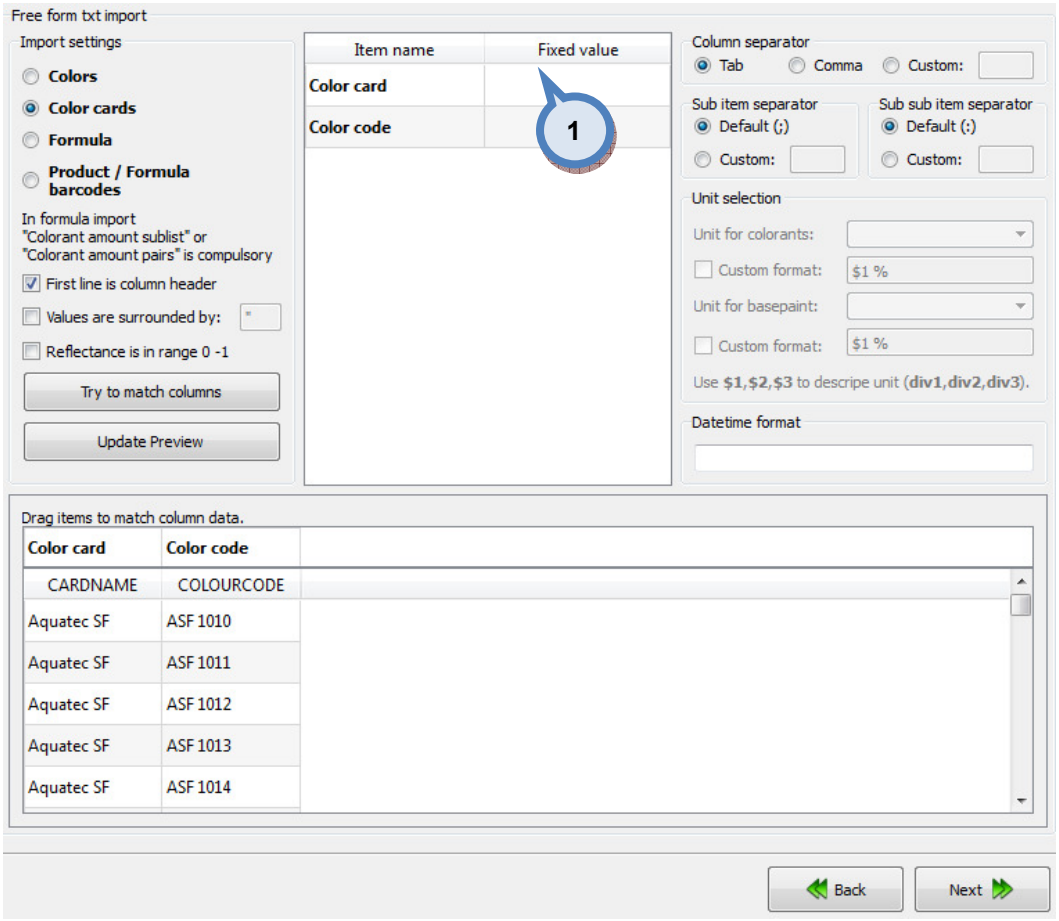
Reflectance row (10nm) = The reflectance values in separate cells. Format: reflectance value. Starting from wavelength 400 with 10nm interval.

Reflectance row (20nm) = The reflectance values in separate cells. Format: reflectance value. Starting from wavelength 400 with 20nm interval.

Next window in the export wizard is: Definable items.

Note: Only the items on bold are mandatory.

When the **Color cards** radio button is selected on the **Free form txt** import page, you have the following options available:



1.Table of items:

Color card:

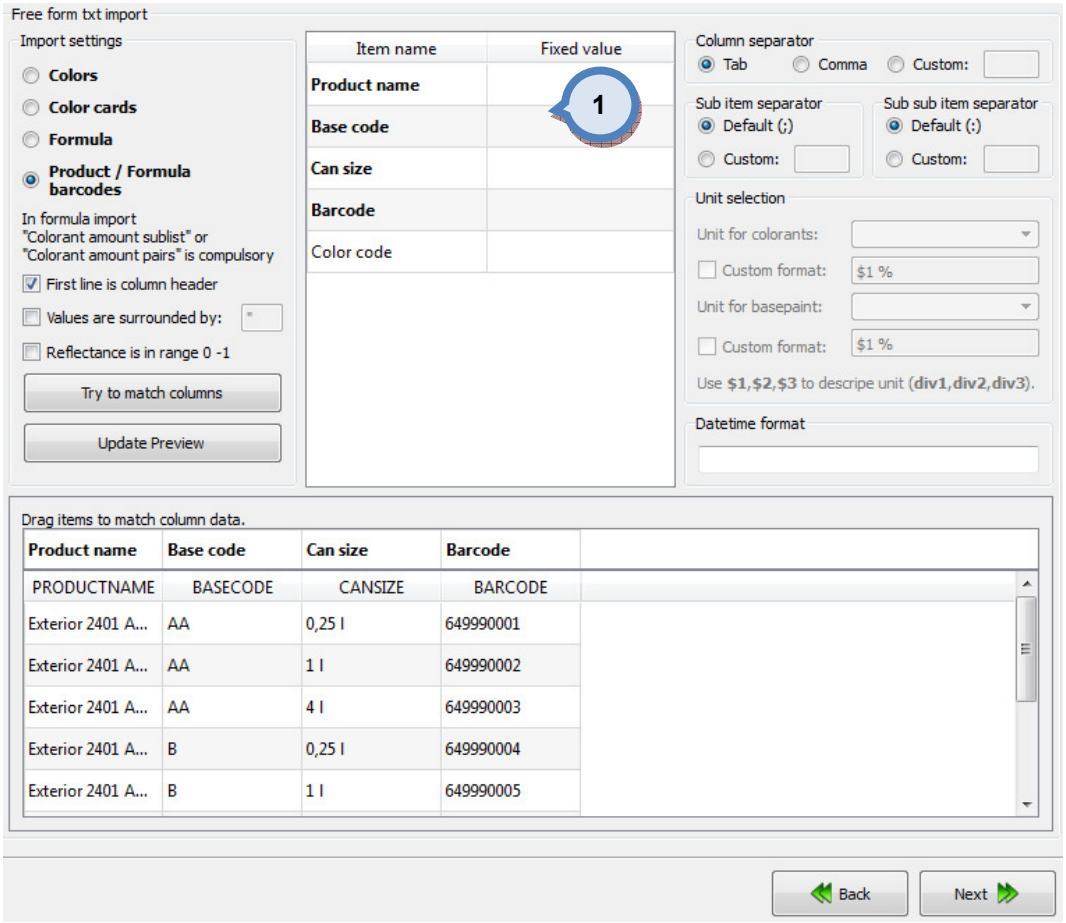
Color code:

Note: Typically in this page, the color card name is given as text in the Fixed value column, and the the color code is selected from the list to be imported. If several color cards are imported, color card name is displayed on the column next to the color code.

Next window in the export wizard is: Definable items.

Note: Only the items on bold are mandatory.

When the **Product barcodes** radio button is selected on the **Free form txt** import page, you have the following options available:



1.Table of items:

Product name

Base code

Can size

Barcode

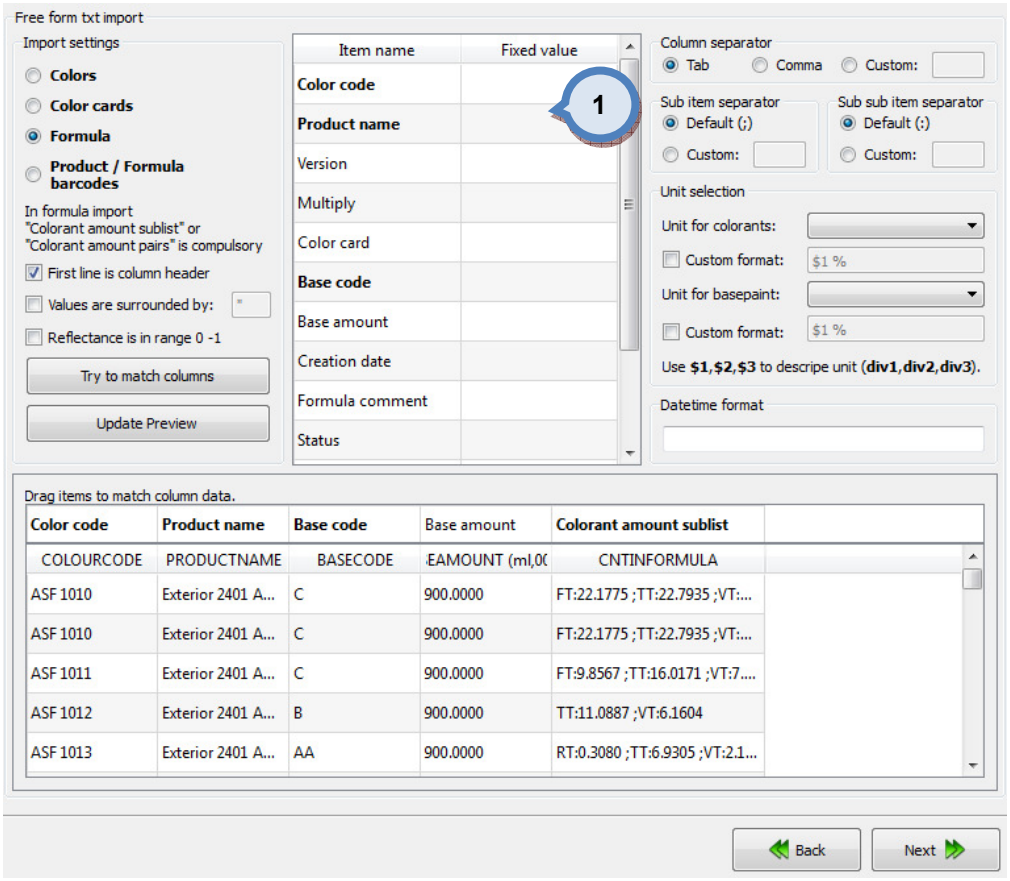
Color code

Next window in the export wizard is: Definable items.

Note: Only the items on bold are mandatory.

Note: If color code defined together with the mandatory items, formula barcodes are created. see **Other** section in the manual.

When the **Formula** radio button is selected on the **Free form txt** import page, you have the following options available:



1.Table of items:

Color code

Product name

Version

Multiply

Color card

Base code

Base amount

Creation date

Formula comment

Status

Primer color code

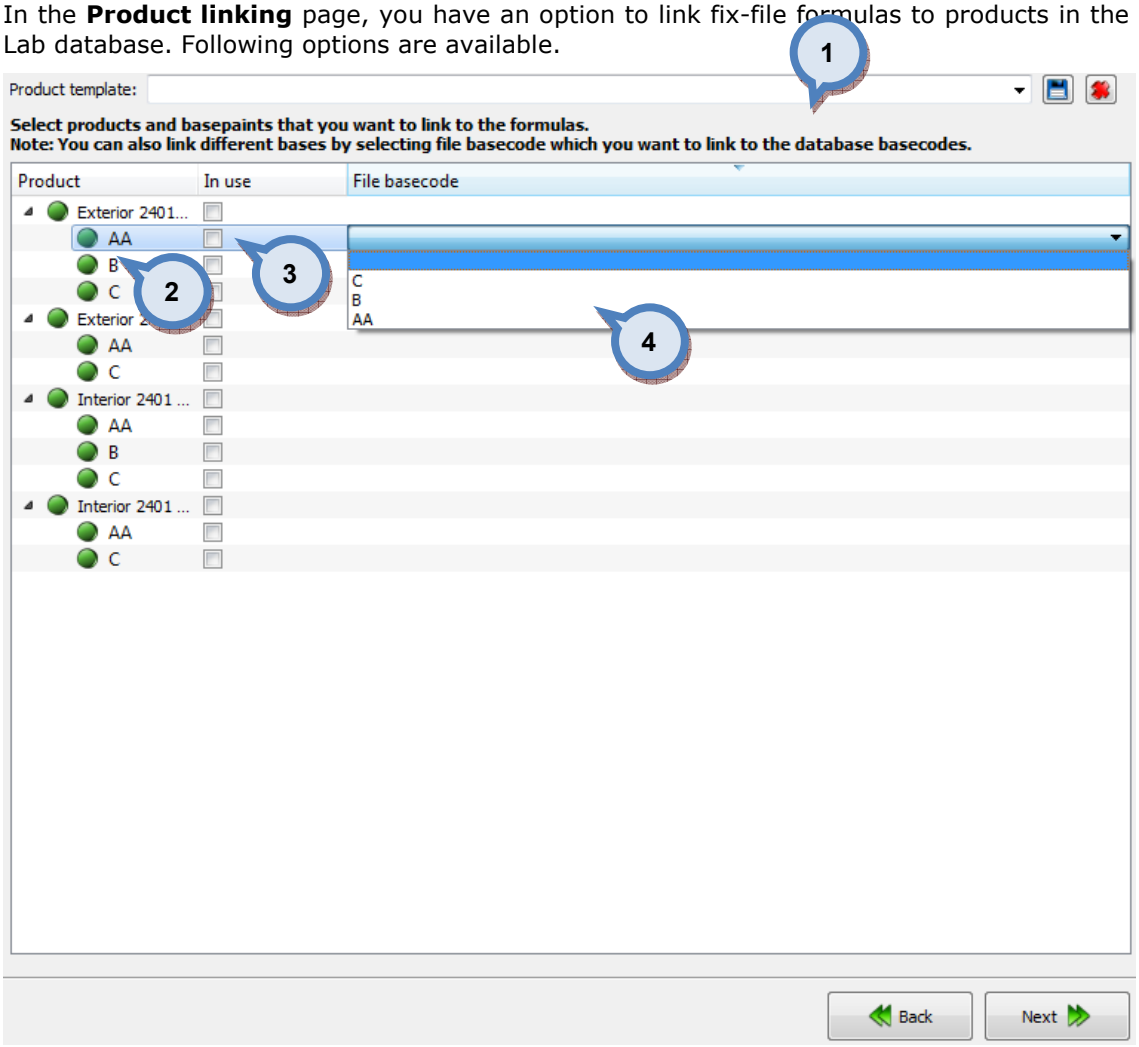
Colorant amount sublist = The color formula is displayed on the single cell. Format is: Colorant 1 code:Colorant 1 amount ;Colorant 2 code:Colorant 2 amount ; Colorant 3 code:Colorant 3 amount.

Colorant amount pairs = Colorant code or name and amount are displayed on two separate columns. First column is for colorant code, and second column is for colorant amount in the formula. All colorants and amounts are followed on same manner on following columns. Colorant amount pairs header is needed only on the first colorant code column.

Next window in the export wizard is: Product linking

Note: Only the items on bold are mandatory.

In the **Product linking** page, you have an option to link fix-file formulas to products in the InnovaTint Lab database. Following options are available.



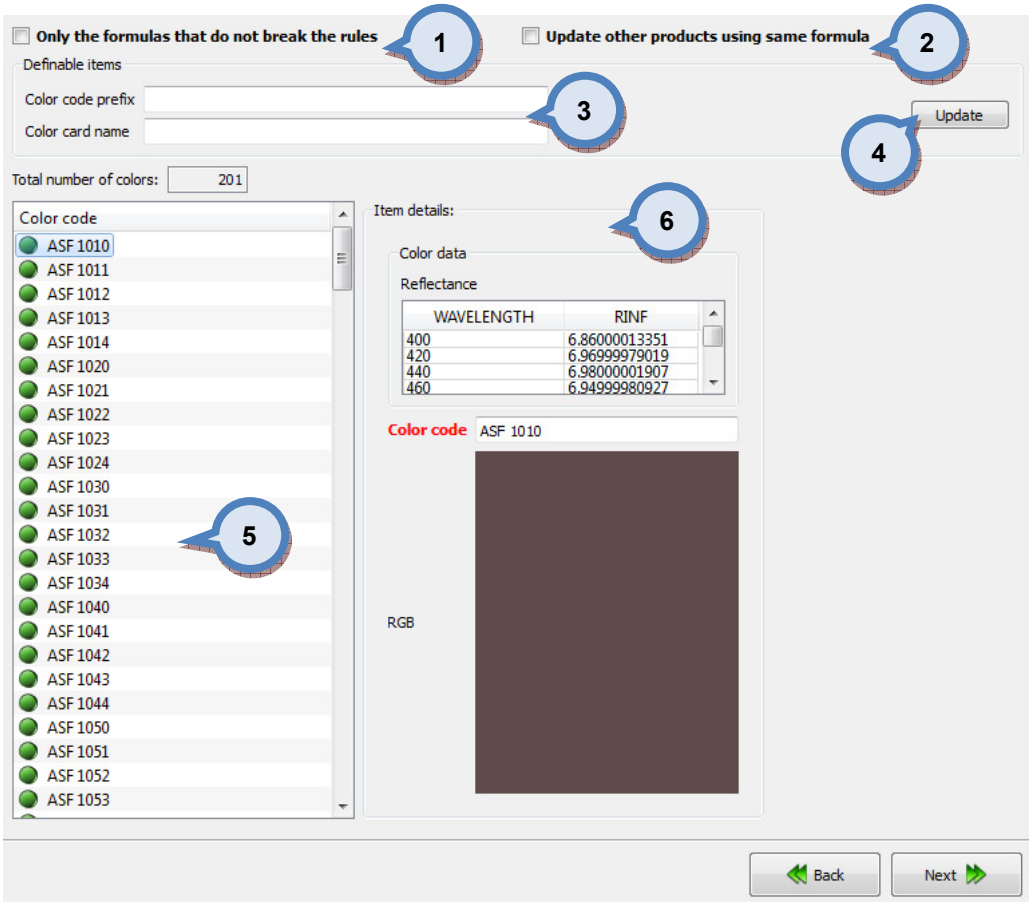
1.Product template: The button to start the export process.

2.Product: List of available products. Suitable products marked with green traffic light, others with red.

3.In use: If check box enabled, fix-file formulas transferred to it.

4.File basecode: List of base codes from the fix-file. Option to link unmatching codes together, for example, db code 'AA' = file basecode 'B'.

In the **Definable items** page, you have the following options:



1. Only the formulas that do not break the rules: If the check box is enabled, only valid formulas get imported, see more information **Matching rules** area.

2. Update other products using same formula: If the check box is enabled all products using the updated formula will get the same.

3.Definable items: Free text field to add text (prefix) on to color code and card name**.**

4.Update: The button to update the view (5) depending on the selection on item (3).

5.Items: The table to view exportable items. Content of it depends on the area from where import comes from formulas, color card, colors or barcodes.

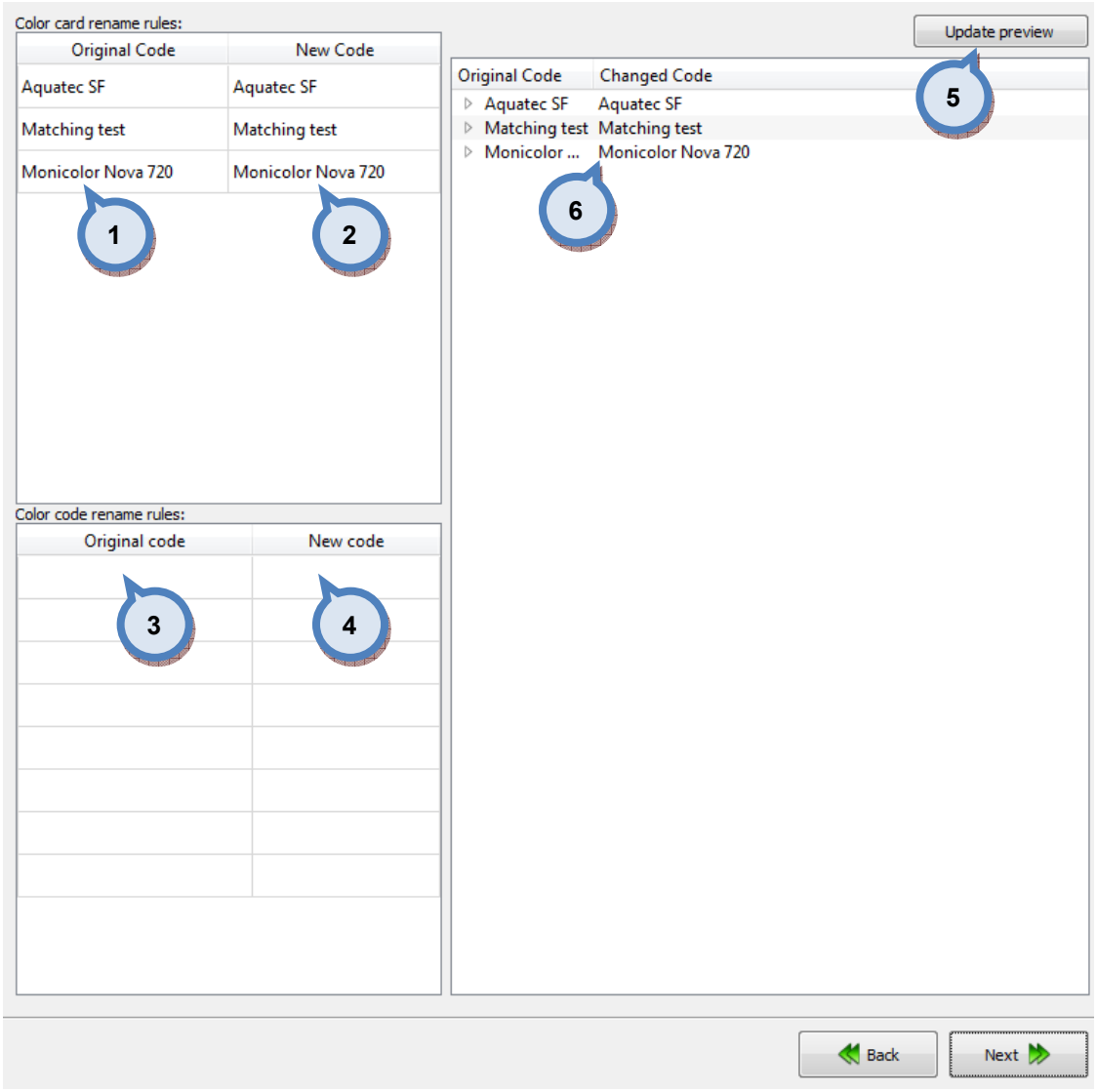
6.Item details: details to match selection on the table. Information on the area if linked to the Items (5). Below table presents the options.

Next window in the export wizard is: Start export.

Note: If the imported data has missing data to complete import, it is shown in the Item table with the red traffic lights.

Import function	**Selected item**	**Item details**
Colors	Color code	Color data (reflectance)
		Color code
		RGB
Color cards	Color card	Card name
Bar code	Product	none
	Base	none
	Can size	barcode
		Can size code
Formula	**Product**	Blended base code
		Info page
		Over fill
		Top off
		VOC limit
	Base	Abstract base code
		Base amount
		Base code
		Multiply
		Nominal fill
		SG (kg/l)
	Single formula	Base amount
		Base code
		Formula
		Multiply
		Color Code
		Creation date
		Formula comment

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

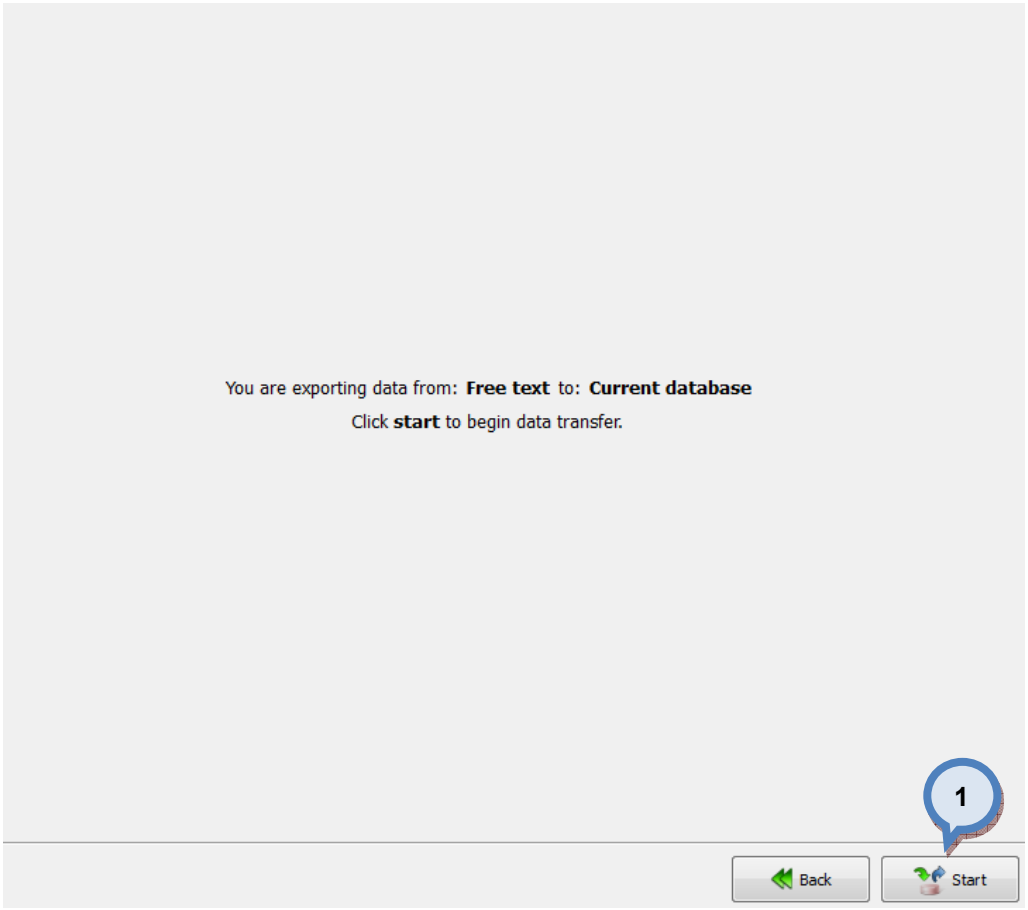
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

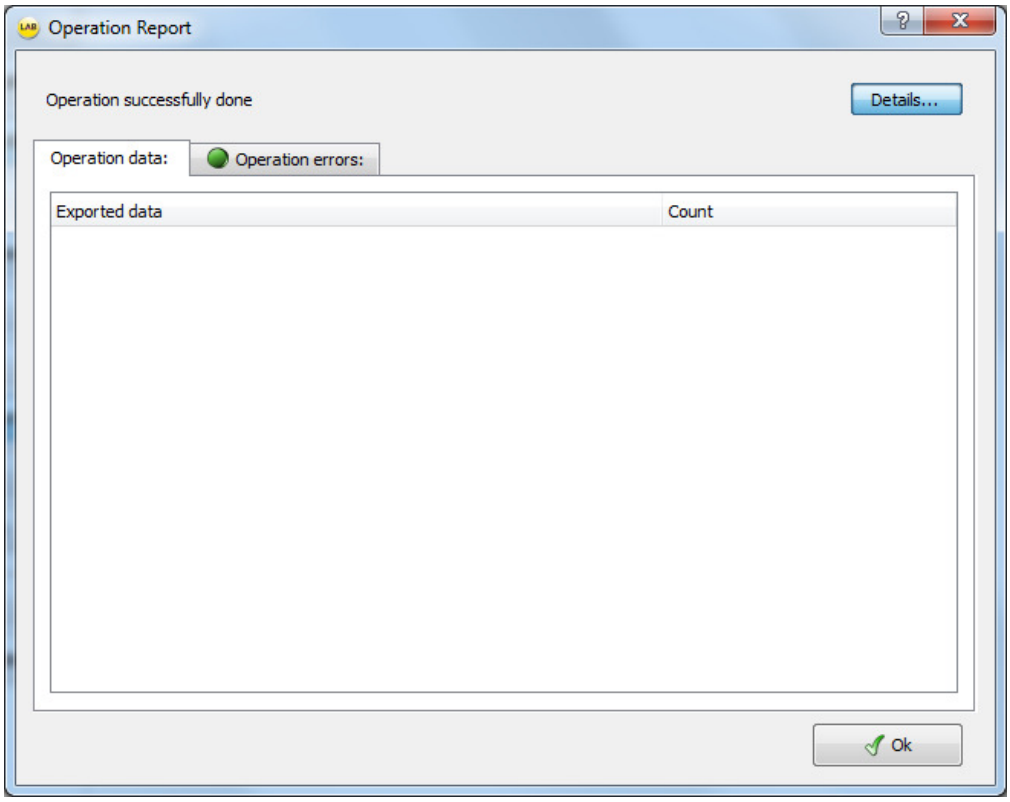
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:

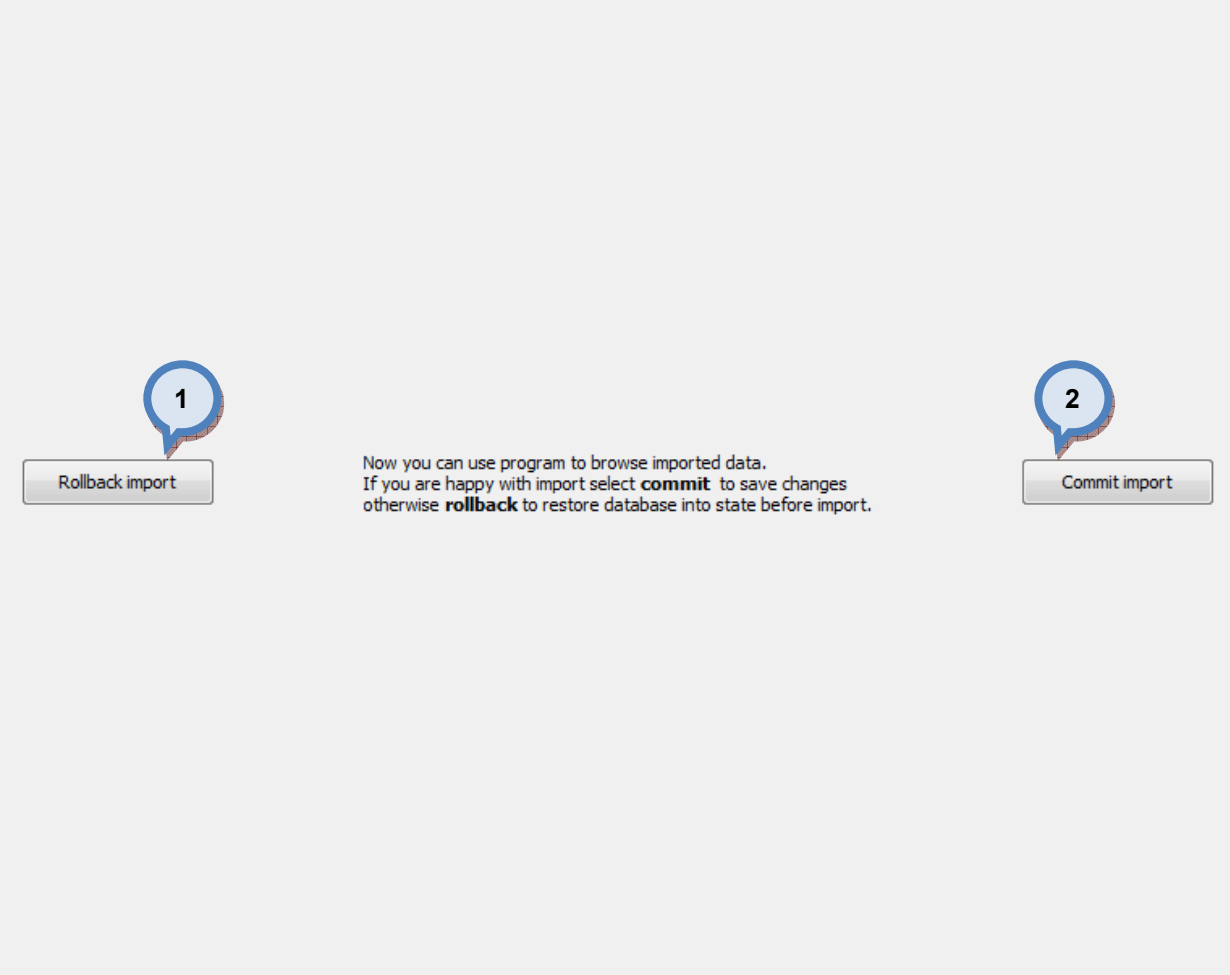


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.



In the **Commit import** page, you have the following options:

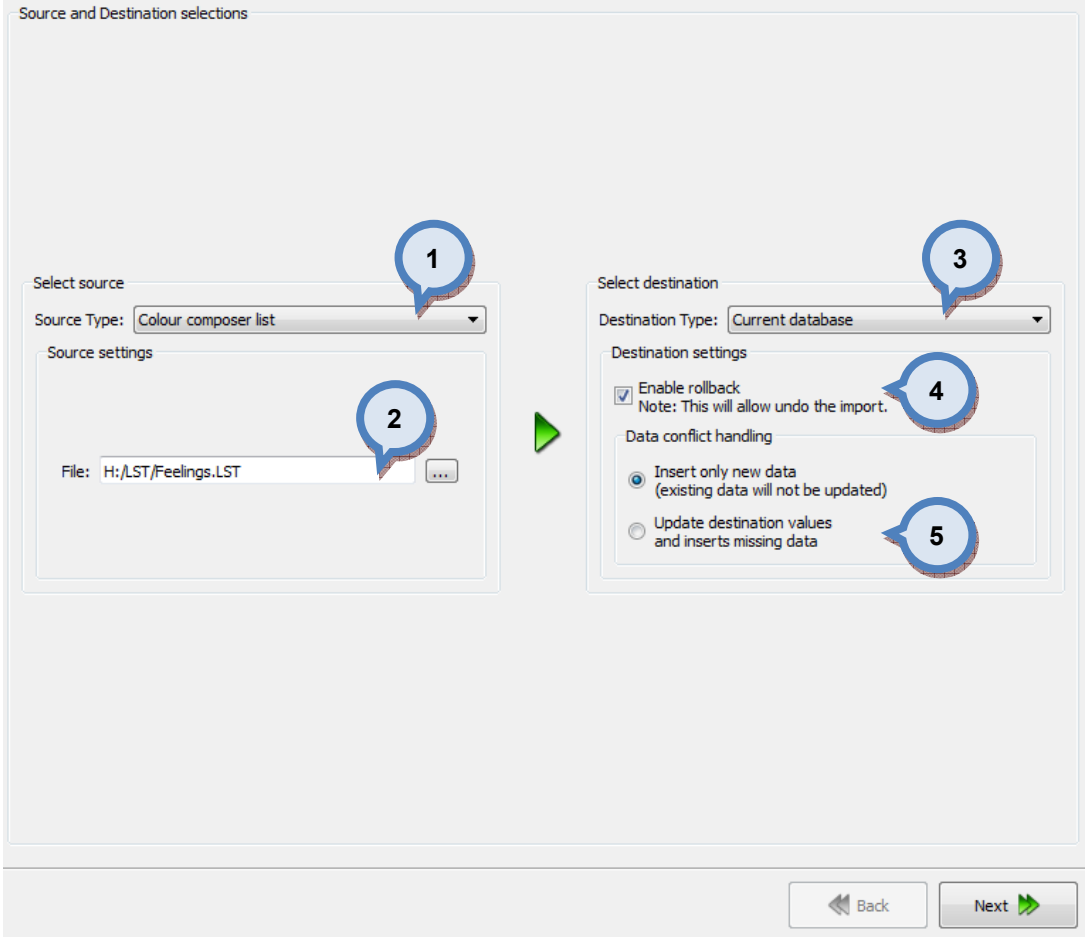


1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

4.5.13 Export from Colour Composer list into the current database

When **Colour Composer list** is selected as source type and **current database** is selected as destination type, the following options are available:



1.Source type: The drop down list to select a source database type.

2.File: The text field to input the file and the folder for the destination file. Use ... button to browse for a file.

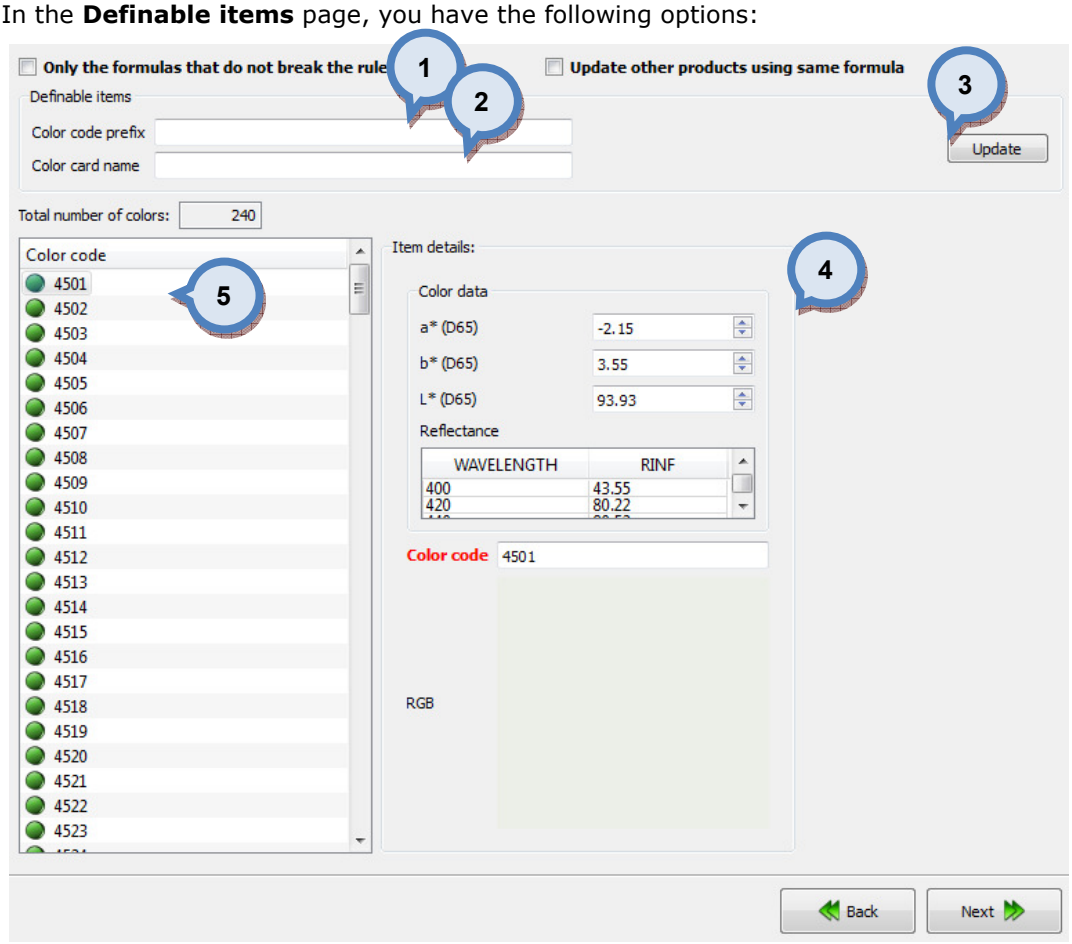
3.Destination type: The drop down list to select a destination database type.

4.Enable rollback: When the check box is enabled, the previous database can be restored.

5.Dataconflict handling: With the radio buttons, you can select what is done when both source and destination databases has values in the same data item. Options are: Insert only new data, and overwrite existing data and insert missing values.

Next window in the export wizard is: Definable items.

In the **Definable items** page, you have the following options:



1.Color code prefix: The text field to add a **prefix** to an existing color code. Click Update button to view the result before proceeding.

2.Color card name: The text field to input the colors into a **new color card**. Type in the color card name and click Update button to view the result before proceeding.

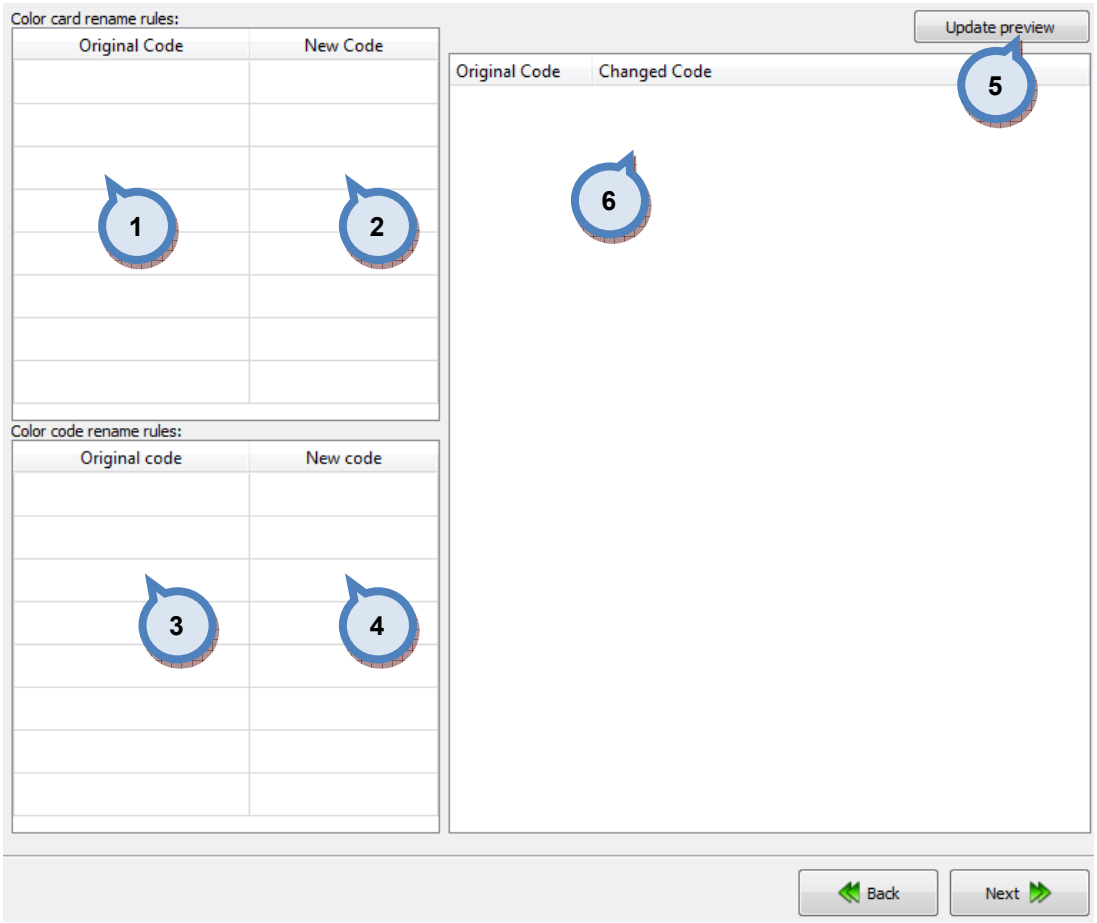
3.Update: The button to preview the result of modifications in the sections 1 and 2.

4.Item details: The window to view details of the color when one is selected from the list (5).

5.Color list: The list of colors imported from the given file.

Next window in the export wizard is: Color card renaming.

In the **Color card renaming** page, you have the following options:



1.Original code: name of the color card

2.New code: new name of the color card

3.Original code: Prefix to be changed

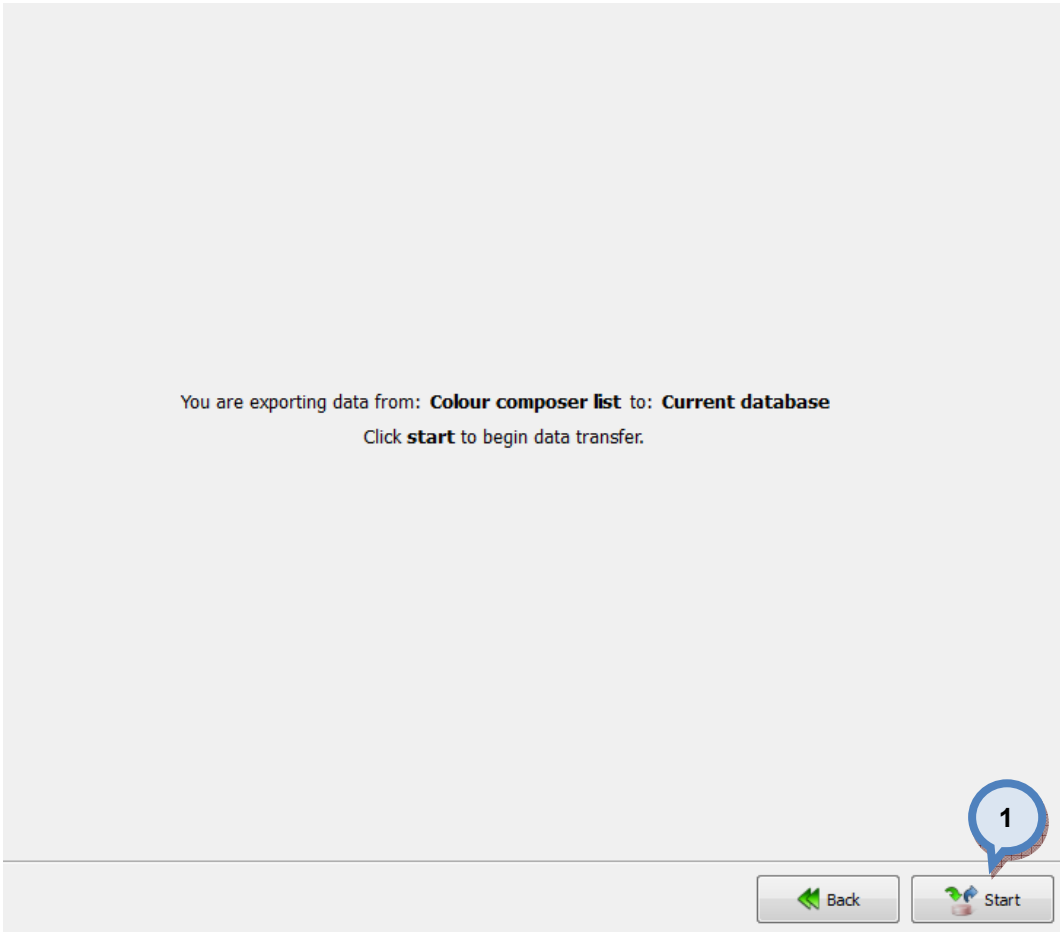
4.New code: New prefix

5.Update preview: A button to update color card names and codes for the preview in a table below.

6.Table: Table to preview the changes made.

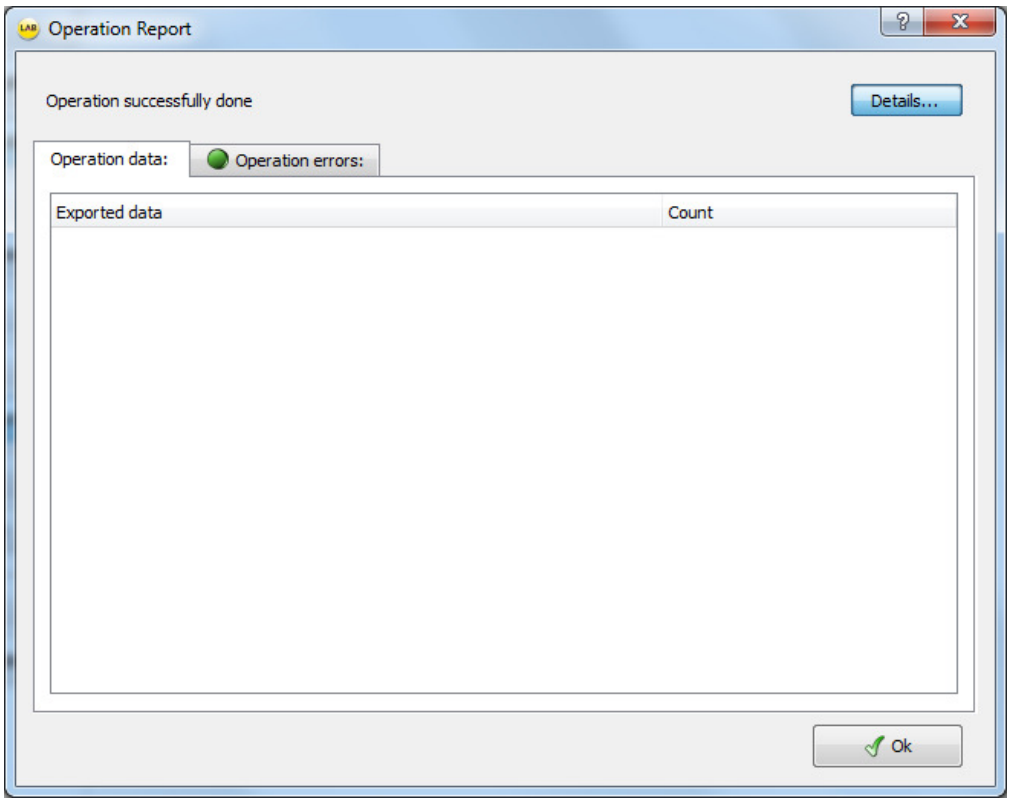
Next window in the export wizard is: **Start export**.

In the **Start export** page, you have the following options:

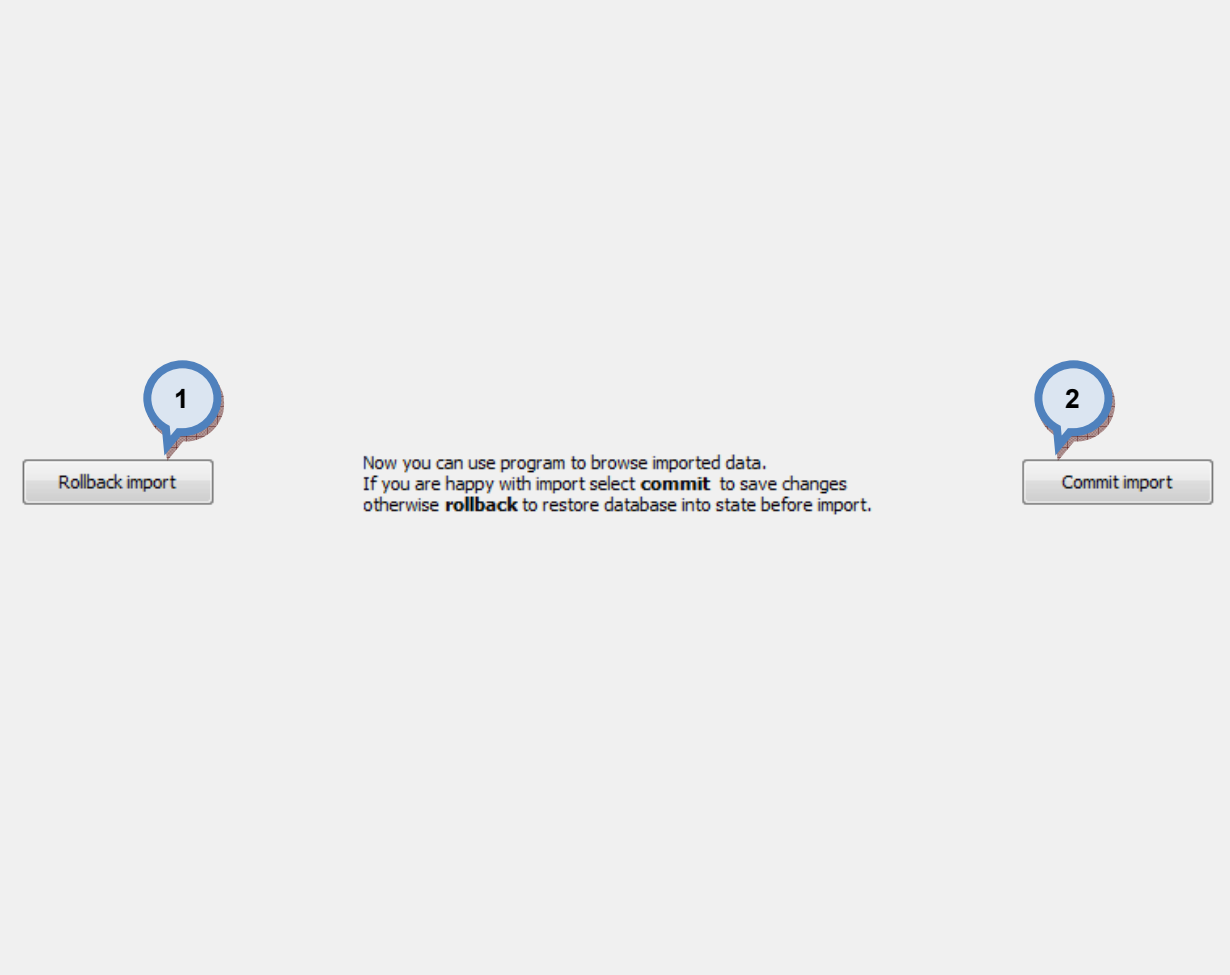


1.Start: The button to start the export process.

When the export process is finished, the export report window is opened up. In the Export report, you have two tab pages: one to display exported data, and one to display export error messages.


Operation Report
Operation successfully done
Details...
Operation data:
Operation errors:
Exported data
Count
Ok

In the **Commit import** page, you have the following options:



1.Rollback import: The button cancel the import process.

2.Commit import: The button to proceed to finalize the import. Note: after clicking the button, import operation cannot be undone.

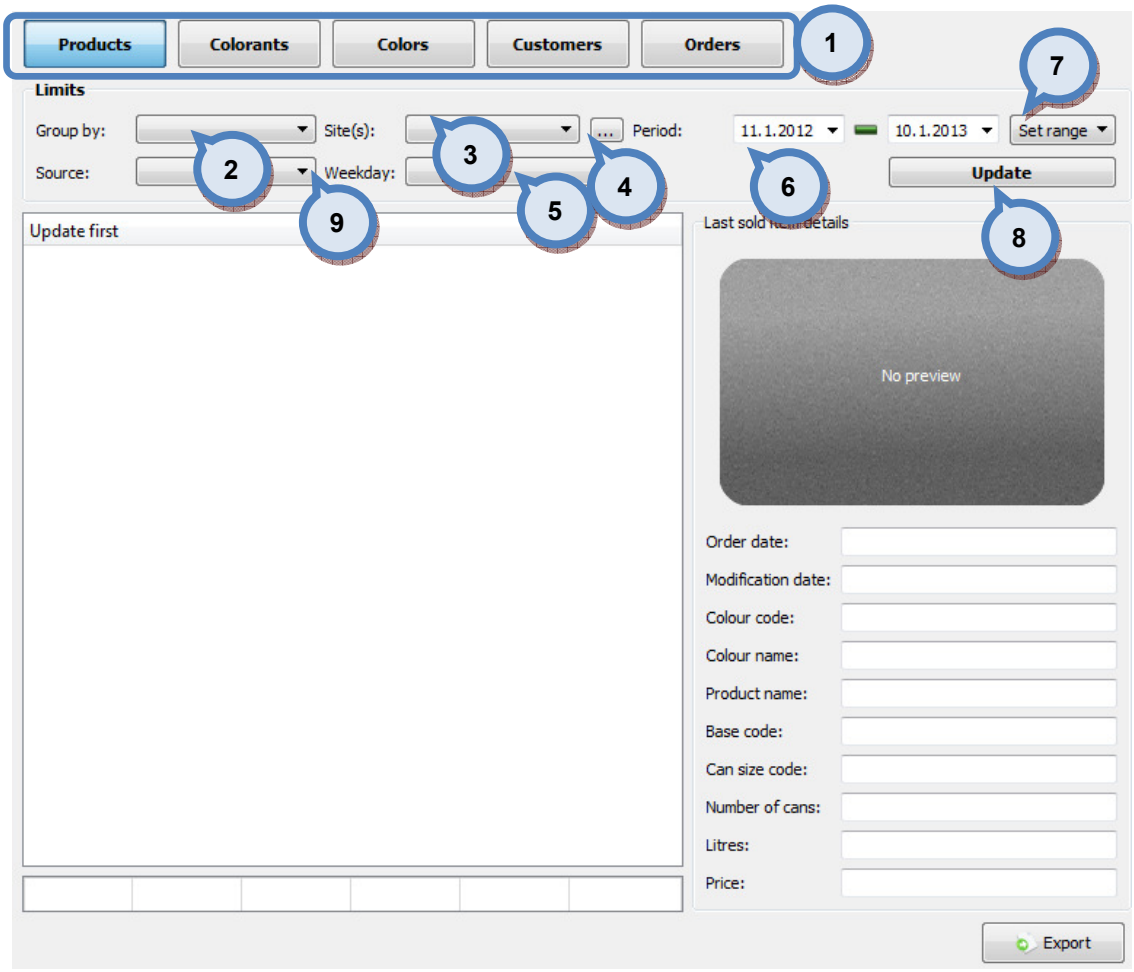
4.6 Statistics

To view statistic, navigate into the **Management & Analysis ⇨ Statistics** page.

In statistics page you can:

- View statistics of tinting history of local site or site groups filtered by:
  - Products
  - Colorants
  - Colors
  - Customers
  - Orders
- Export search result

The **Statistics** page has 4 buttons to view data by Products, Colorants, Colors, Customers, or by Orders.



1. The button to select data type: products, colorants, colors, or customers

Limits: The selectors to set limiting criteria for the data:

2.Group by: The selector to group data by products (empty), site, site groups, or by weekdays.

3.Site(s): The drop down list to view data by all sites (empty), site groups, single site, or by local site.

4.The ... button to set site groups.

5.Weekdays: The drop down list to select by which weekday or whole week (empty) data is obtained.

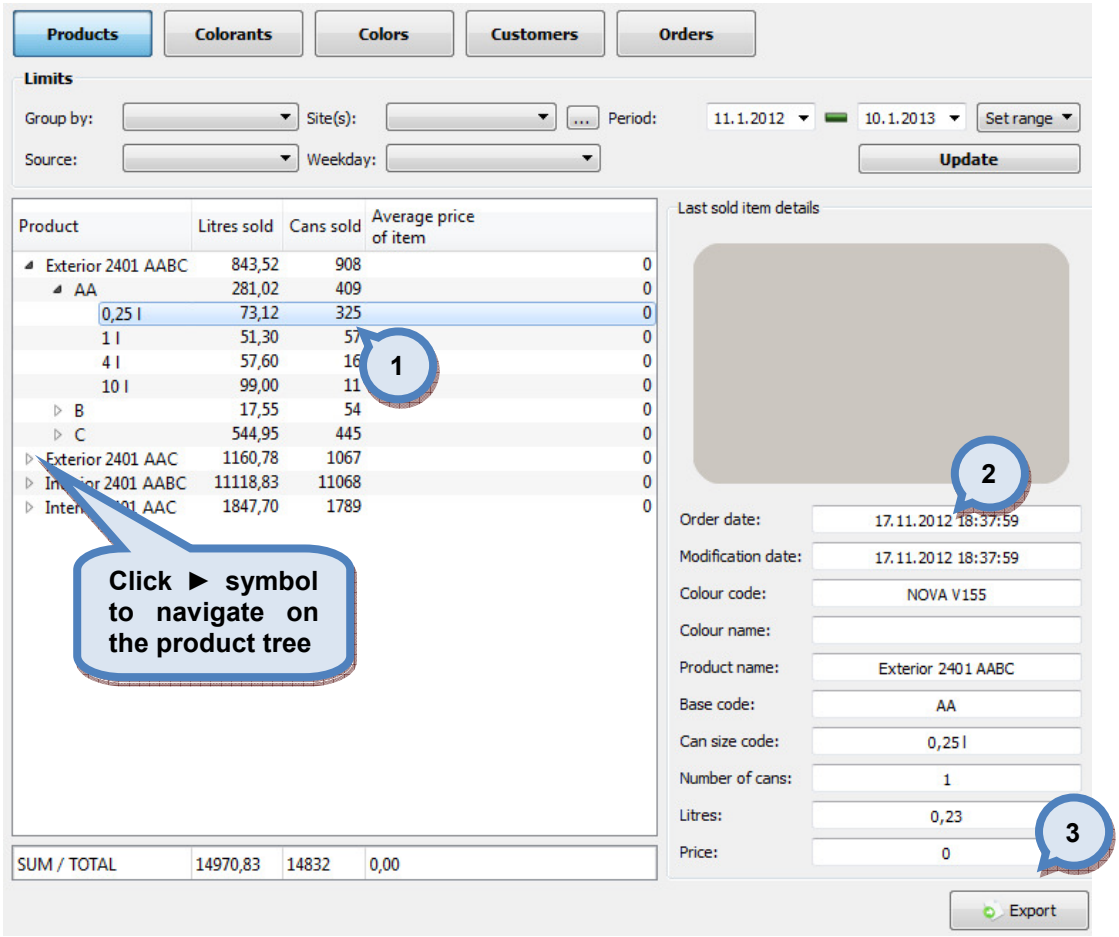
6.Period: The selector to set start and end date range for the data to be obtained.

7.Set range: The drop down list for preset date ranges. Options are: previous week, previous month, previous year, from the beginning of this month, and from the beginning of this year.

8.Update: The button to refresh data table (3) based on the data type selection (1) and the limits (2) settings.

9.Source: The dropdown list to select by the data source type, all (empty), main (paint company data), local (custom data), or by external (order from external source).

When the **Products** button is selected on the **Statistics** page, and the **Update** button is clicked, the following options are available:

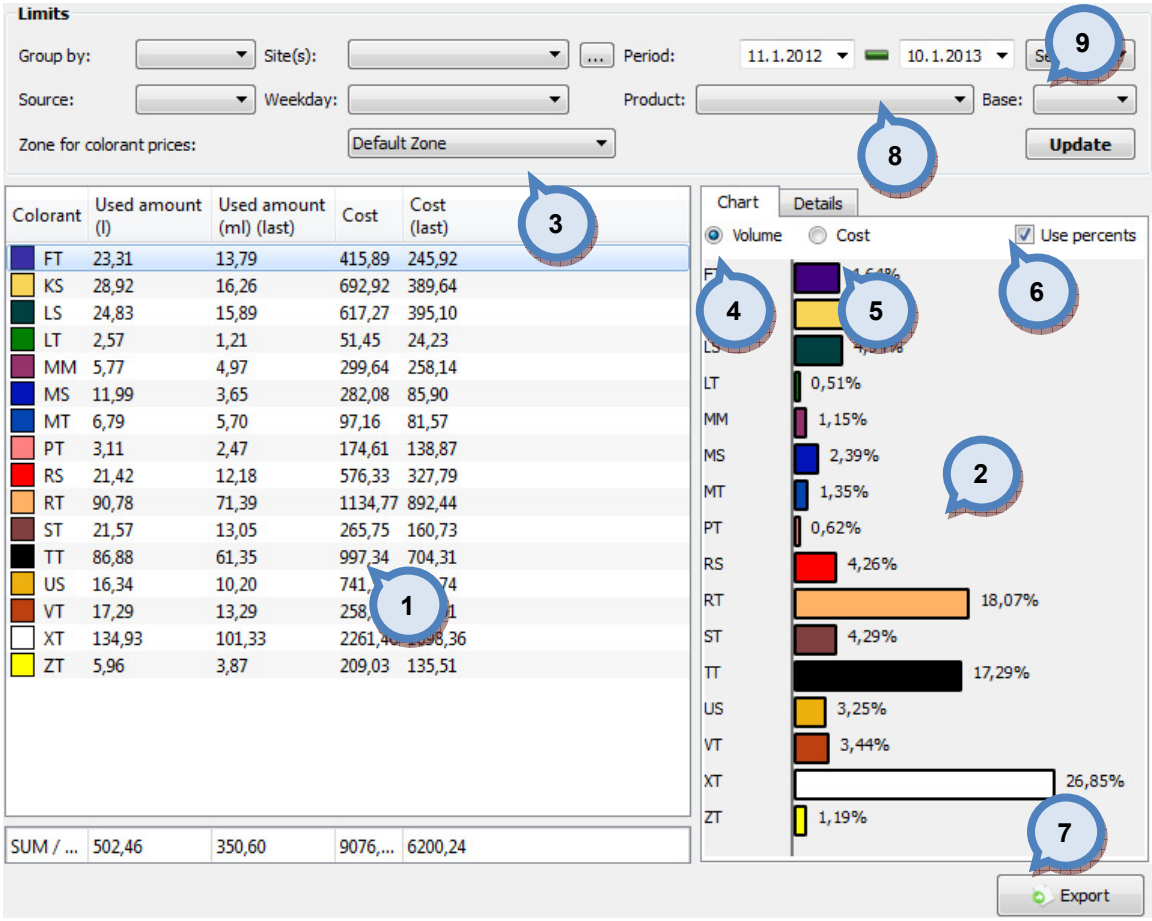


1. The table to display obtained data. Use ► symbol to navigate to the lower level on the product tree.

2.Last sold item details: The table of details and visual color window of the last sold item.

3.Export: The button to export the obtained data into the text file.

When the **Colorants** button is selected on the **Statistics** page, and the **Update** button is clicked, the following options are available:



1. The table to display obtained data.

2.The graph to display colorant usage (by volume or by cost)

3.Zone for colorant prices: The drop down list to select zone specific prices for the colorant prices.

4.Volume: When the radio button is selected, values in the graph are based on sold litres.

5.Cost: When the radio button is selected, values in the graph are based on cost of the sold litres.

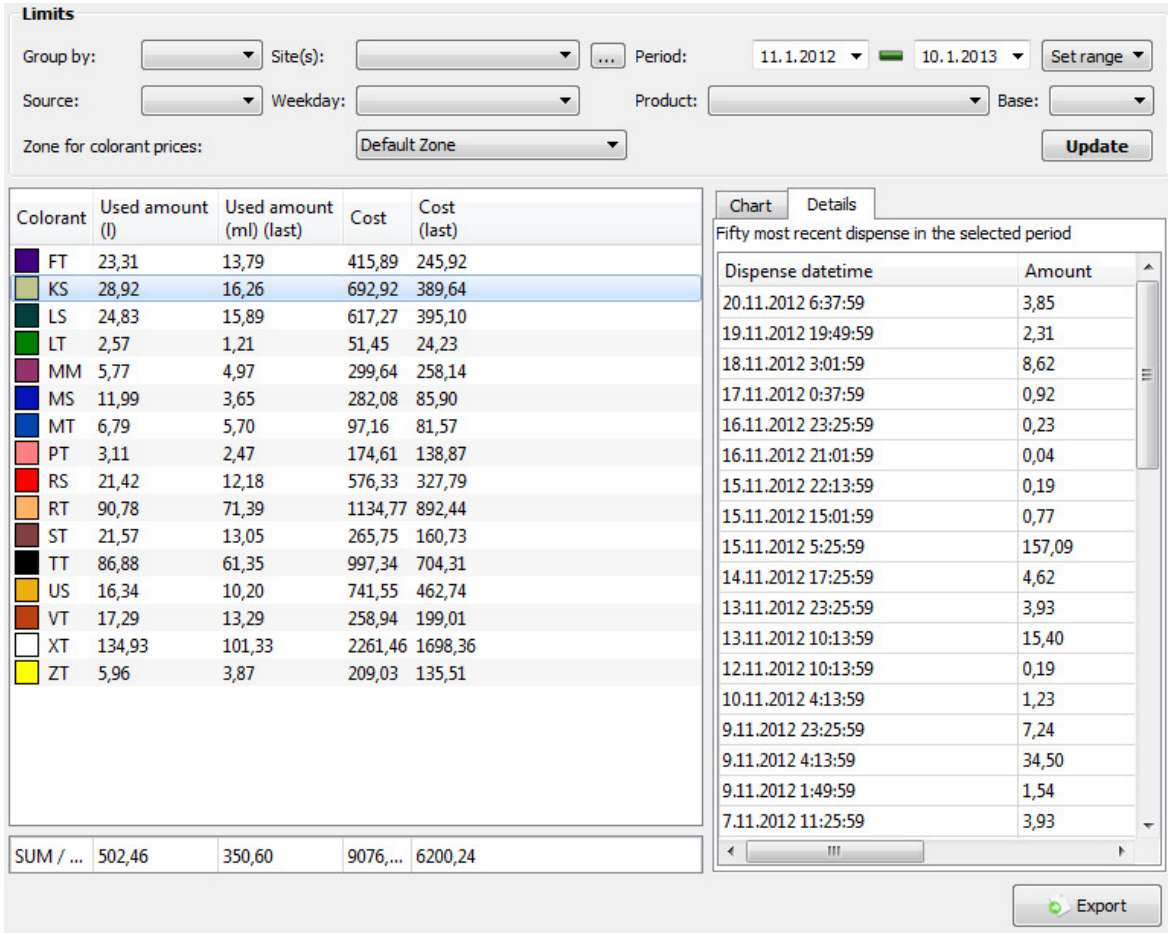
6.Use percentages: When the check box is enabled, values in the graph are percentages, either by volume or cost, based on the selection on items 4 and 5.

7.Export: The button to export the obtained data into the text file.

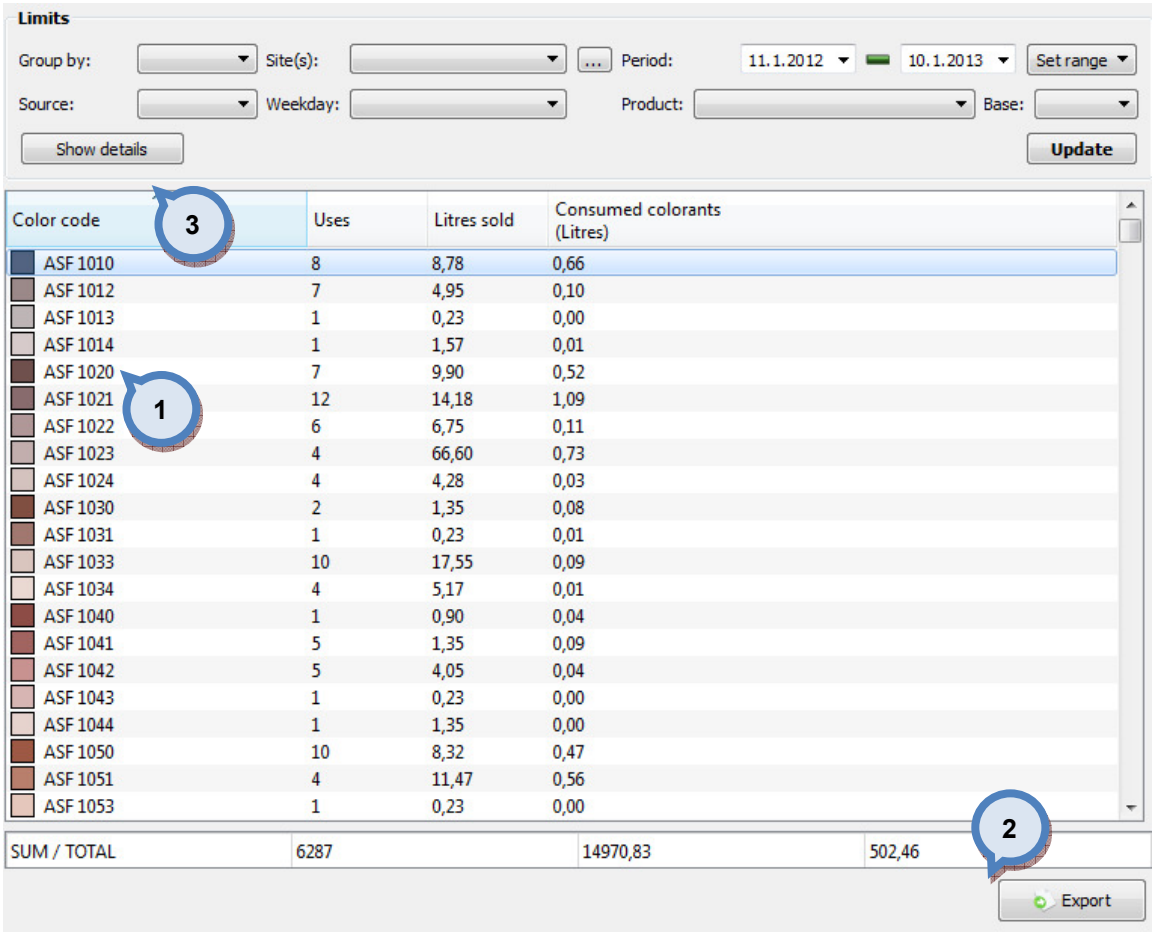
8.Product: Drop down list to select product for evaluation.

9.Base: Dropdown list to select base for evaluation.

When the **Colorants** button is selected on the **Statistics** page, and **details** tab and one of the colorants selected, and the **Update** button is clicked, the following view is shown.



When the **Colors** button is selected on the **Statistics** page, and the **Update** button is clicked, the following options are available:

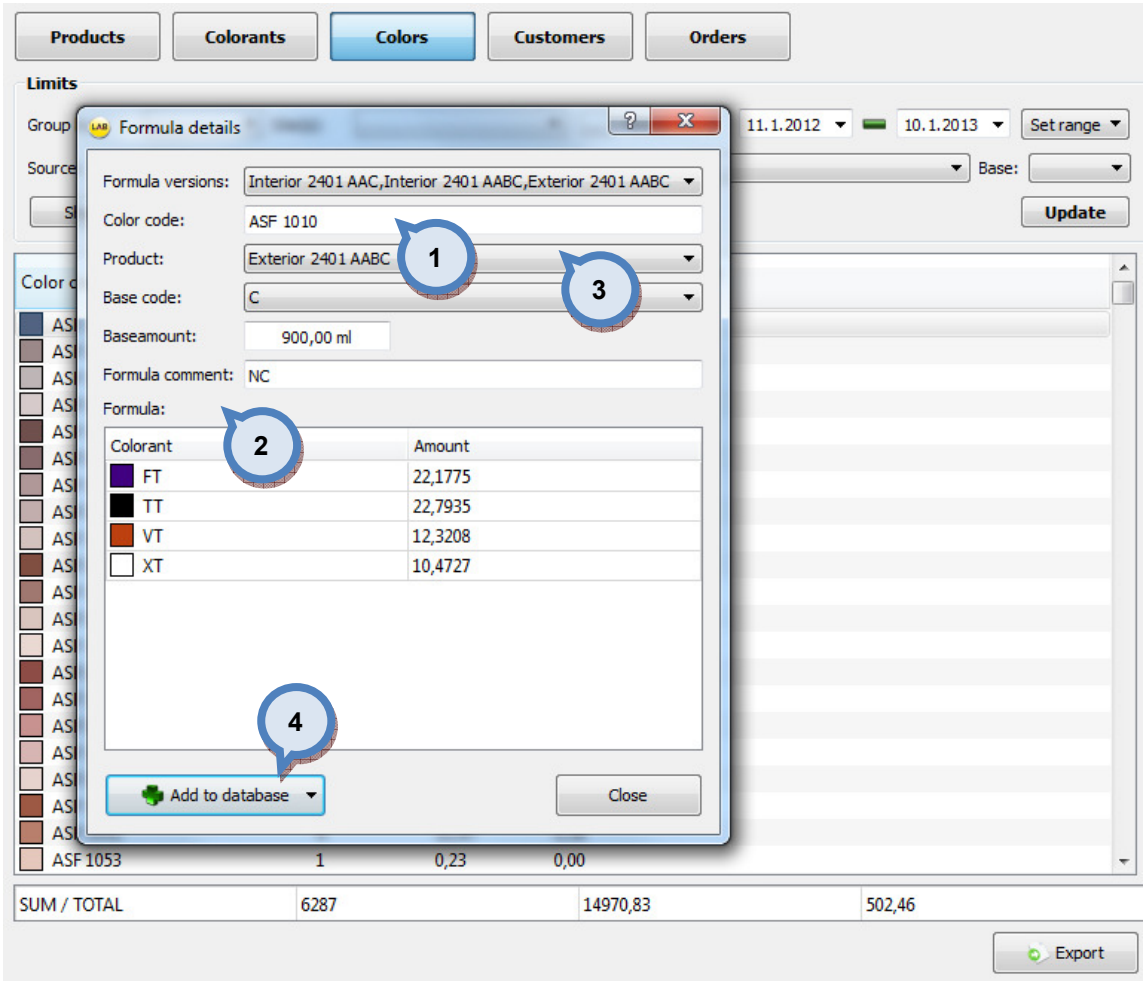


1. The table to display obtained data.

2.Export: The button to export the obtained data into the text file.

3.Show details: The button to display details of the selected color.

When the **show details** button is clicked on the **Colors** sub page of the **Statistics** page, the following information is available:



1.Color code: The field to display the selected color code.

2.Formula: The table to display the formula of the selected color.

3:When multiple formula versions are dispensed, use following options to select the needed formula version, product, and base code:

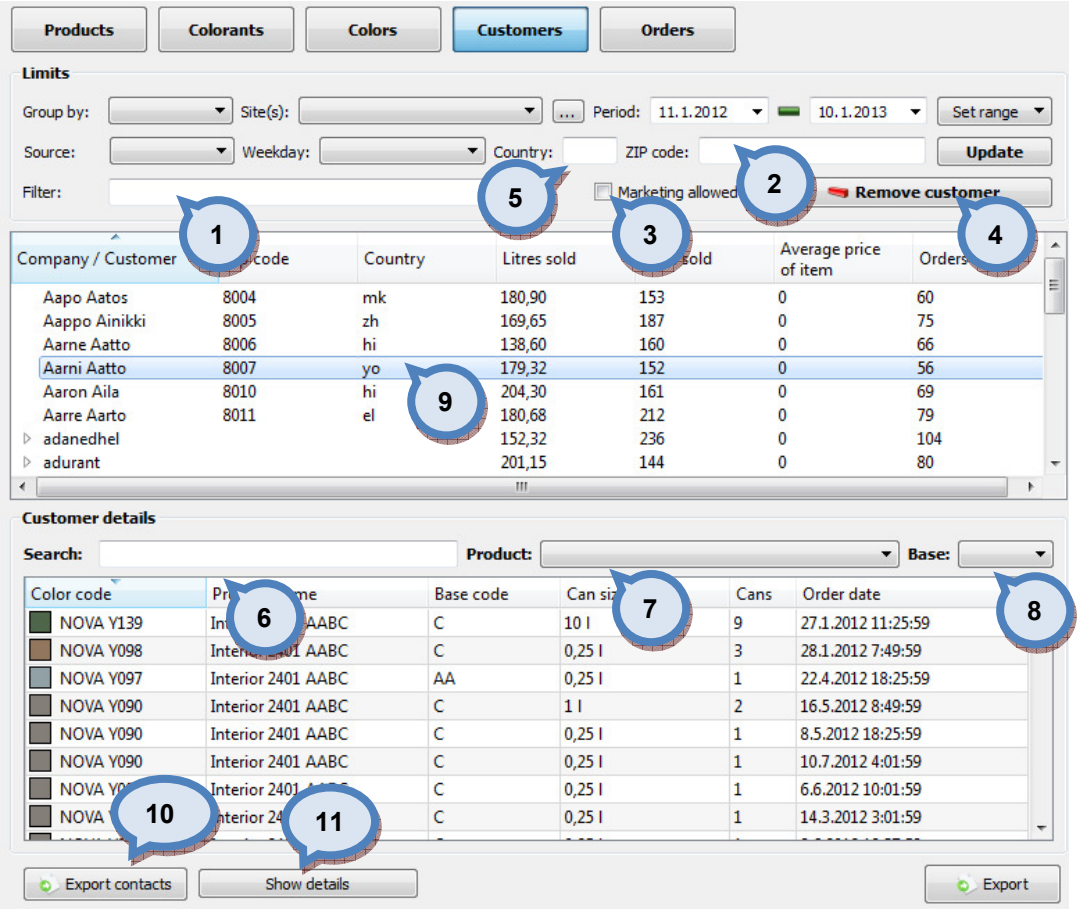
Formula version: The drop down list to select a formula version.

Product: The drop down list to select a product.

Basecode: The drop down list to select a base paint.

4.Add to database: The button to add selected formula into the database **as working version** or **as production version**.

When the **Customers** button is selected on the **Statistics** page, and the **Update** button is clicked, the following options are available:



1. Filter: The text field to narrow down the search result by entering customer name or company or part of it.

2.ZIP code: The text field for the ZIP code.

3.Marketing allowed: When the check box is enabled, marketing is allowed. This setting can be set in the POS software by customers request.

4.Remove customer: When the button is clicked, the selected customer is deleted from the database.

5.Country: The text field for country code.

6.Search: The text field to search a customer by entering a customer name or the part of it.

7.Product: The drop down list to select a product.

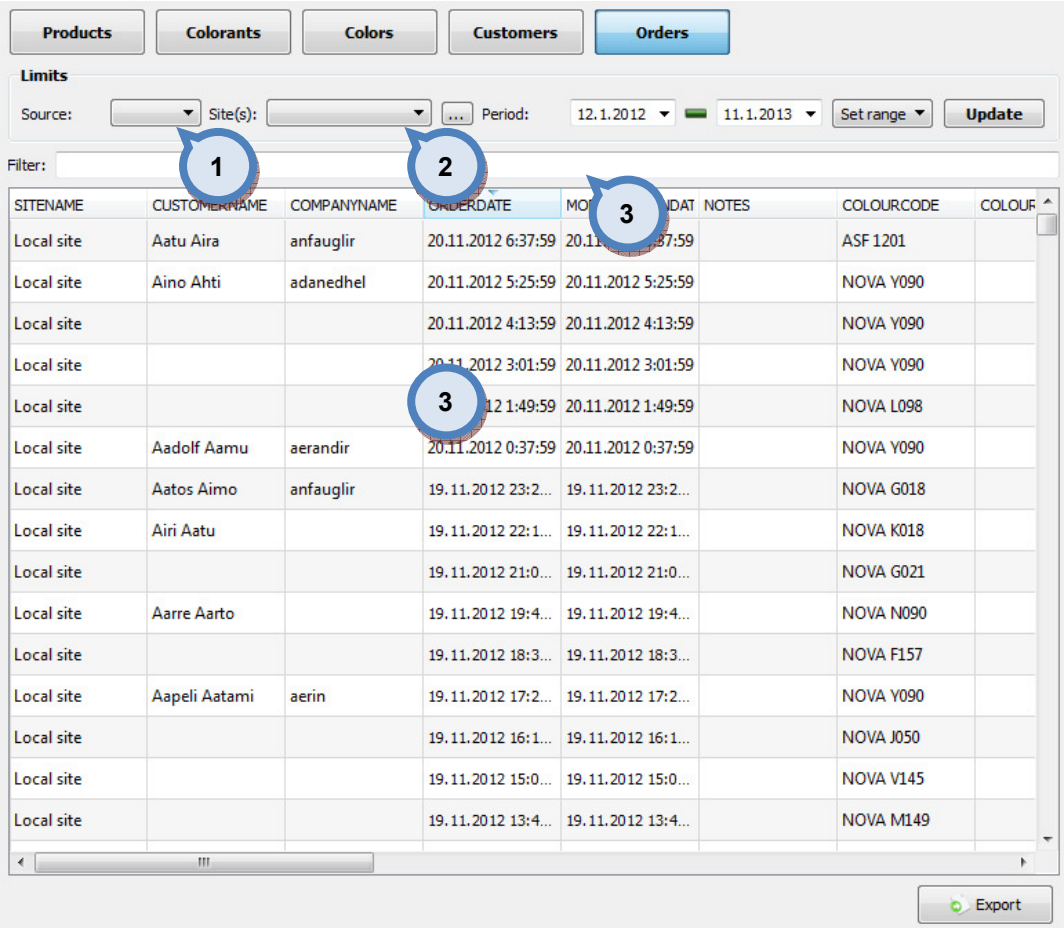
8.Base: The drop down list to select a base paint.

9.Customer details: The table to display the customer list.

10.Export contacts: The button to export the details of the selected customer into the text file.

11.Show details: The button to show all contact details of the selected customer.

When the **Orders** button is selected on the **Statistics** page, and the **Update** button is clicked, the following options are available:



1.Source: The dropdown list to select by the data source type, all (empty), main (paint company data), local (custom data), or by external (order from external source).

2.Site(s): The drop down list to view data by all sites (empty), site groups, single site, or by local site.

3.Filter: Text field to limit search results (press Update to activate). Filtering columns are bolded item below (4)

4.Table: To show order items. Table contains following column, which each can be sorted by clicking the header of the column.

- Site name

- Customer name

- Company name

- Orderdate

- Modification date

- Notes

- Color code

- Color name

- Original code

- RGB

- Product name

- Base code

- Base volume

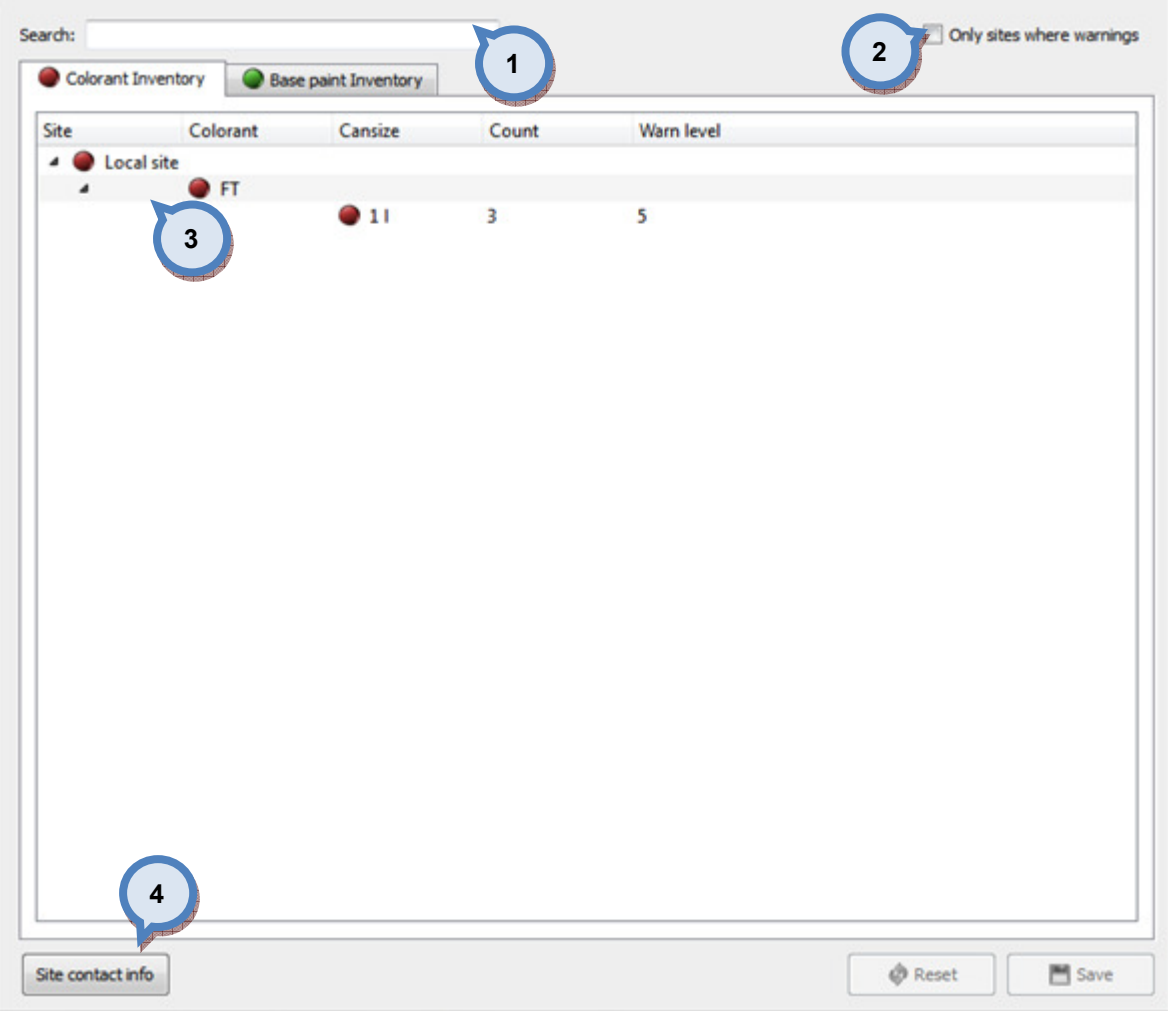
- Nominal amount
- Gravimetric (true = T, False = F)
- Ncans (Number of cans)
- Discount
- Price
- Fcomment (formula comment)
- Formula

4.7 Site inventory

To manage you colorant and the base paint stock, navigate into the **Management & Analysis ⇨ Site inventory** page.

In this page you can view the stock levels by can sizes on the each of the each sites. This page has 2 tab pages: one for the **Colorants** and one for the **Base paints**.

In the **Colorant inventory** tab page of the **Site inventory** page, you have the following options available:



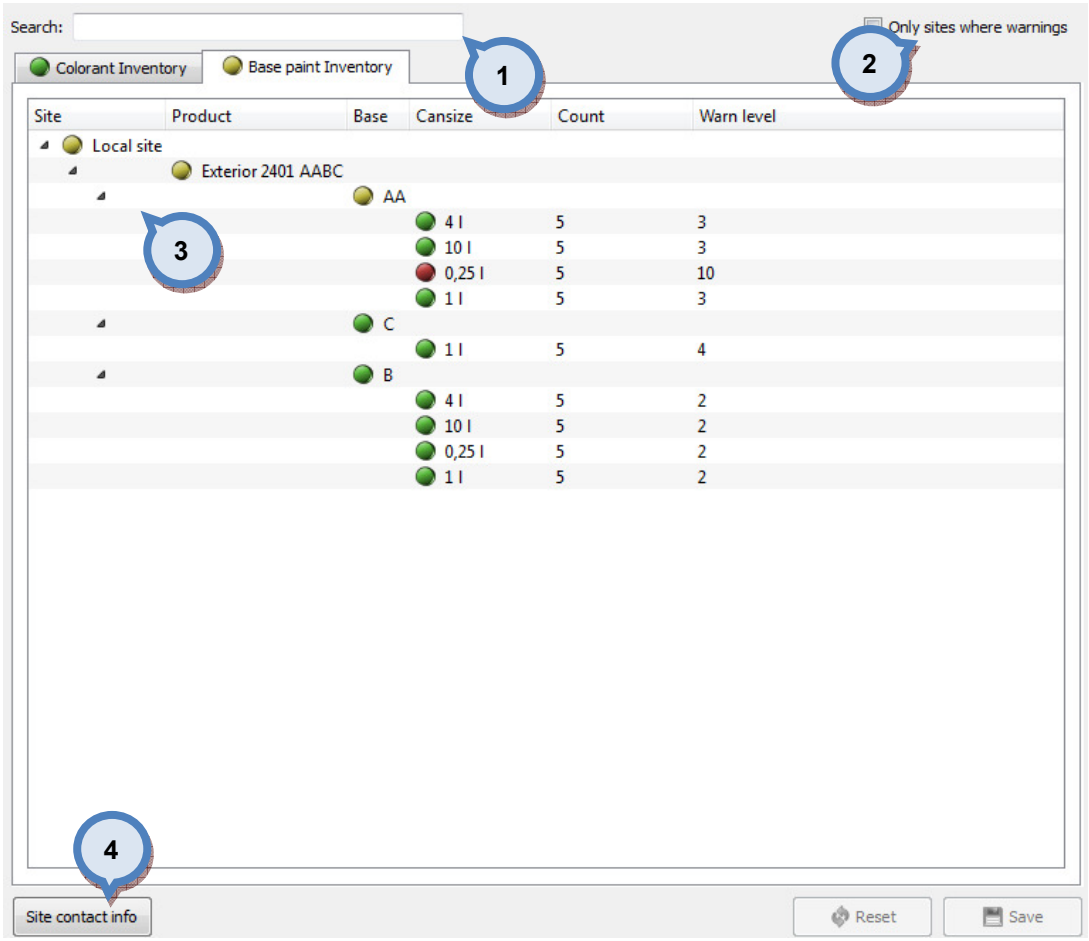
1.Search: The text field to input the search criteria.

2.Only sites where warnings: When the check box is enabled, only the sites having warnings are displayed on the list (3).

3.The list of the sites, colorants, can sizes, counts, and warning levels.

4.Site contact info: The button to view contact info of the site.

In the **Base paint inventory** tab page of the **Site inventory** page, you have the following options available:



1.Search: The text field to input the search criteria.

2.Only sites where warnings: When the check box is enabled, only the sites having warnings are displayed on the list (3).

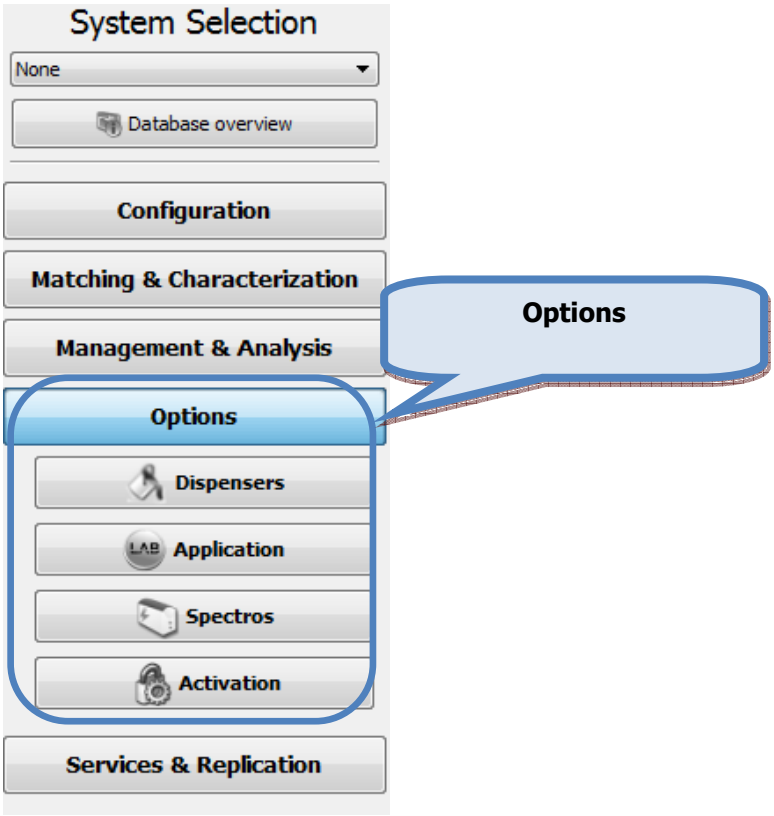
3.The list of the sites, colorants, can sizes, counts, and warning levels.

4.Site contact info: The button to view contact info of the site.

5 Options

Options section has four sub pages, where you can:

- Install the dispensing equipments
- Install the printers
- Install the spectrophotometers
- Activate or return your software license

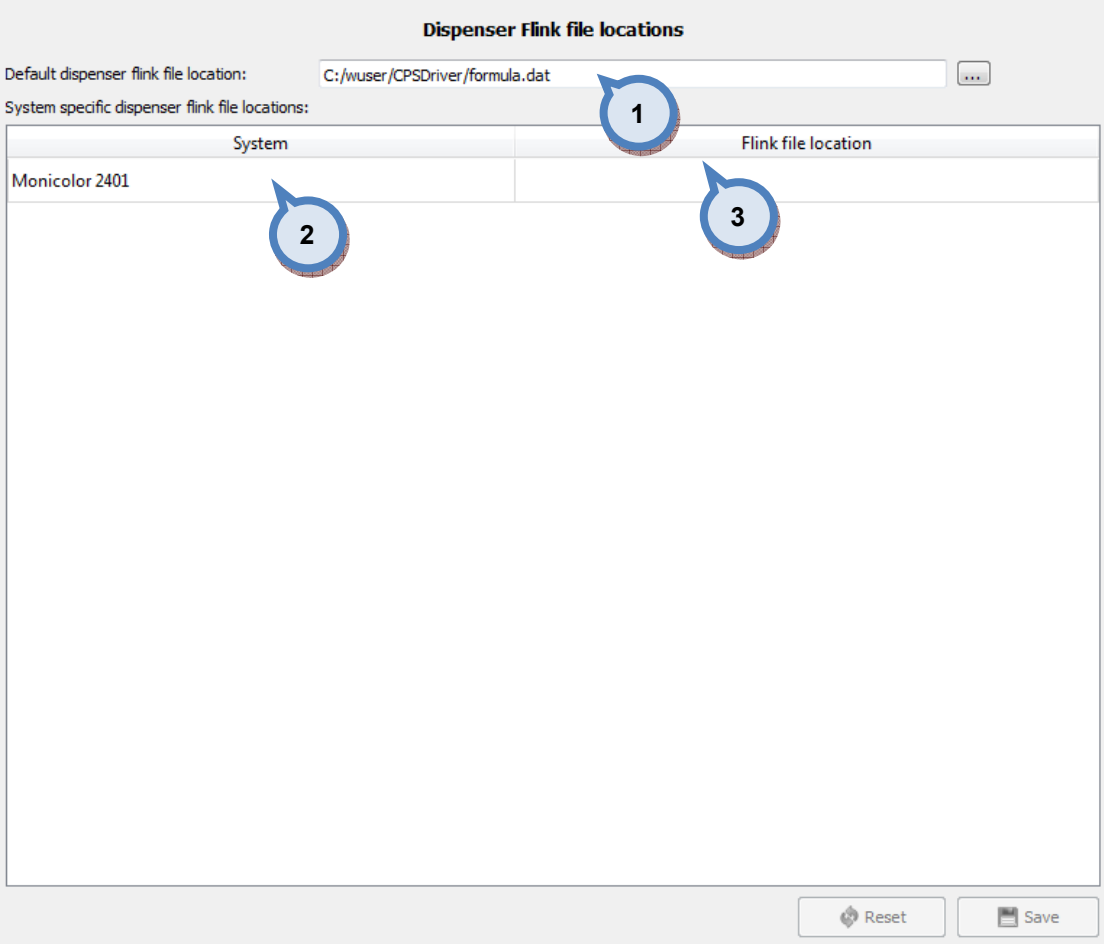


5.1 Dispensers

InnovaTint LAB uses f-link files to communicate with the dispensers, to set a default flink file location navigate into the **Options** ⇨ **Dispensers** page.

Here you can set a default file, as well as system specific files for each of the systems in the database.

On the **Dispensers** page, you have the following options available:



1.Default dispenser flink file location: The text field for the file and folder for the flink file. Use the ... button to open the file browser to search a file.

System specific dispenser flink file locations:

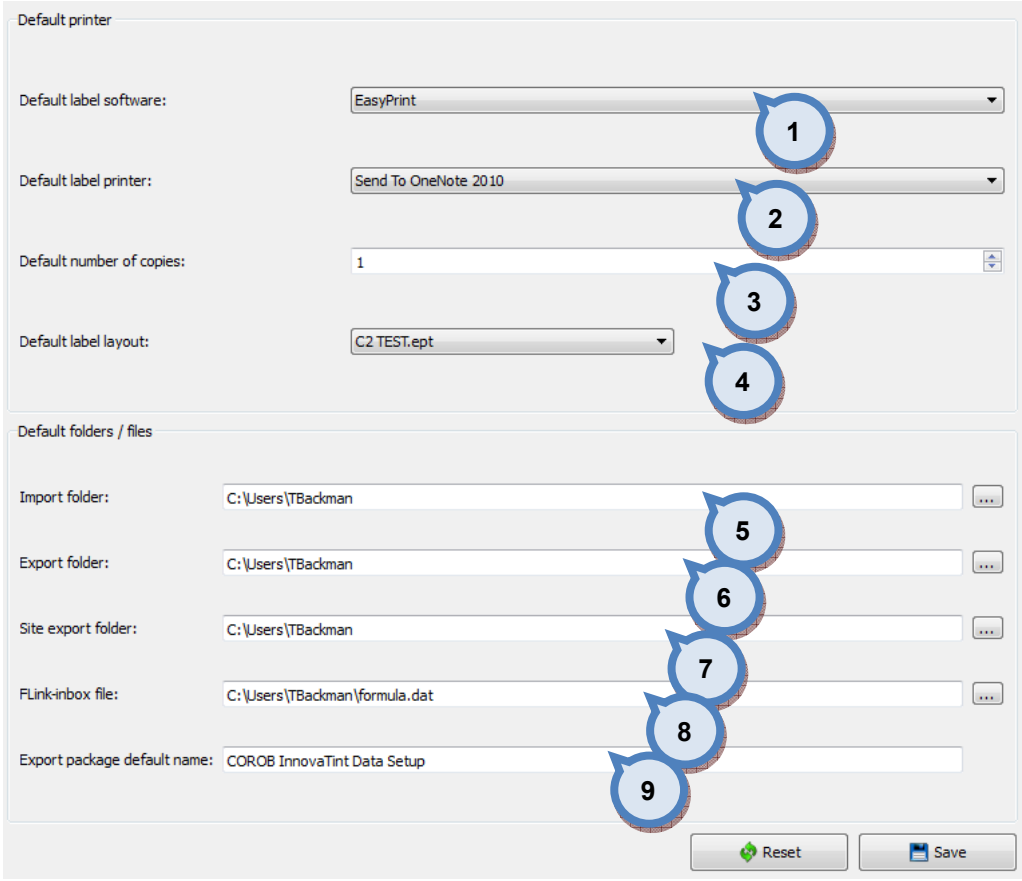
2.System: The list of systems in the database.

3.Flink file location: The text field for the file and folder for the flink file for each of the systems (optional). Double click the field to open up the file browser to select a file.

5.2 Printers

To install a printer, navigate into the **Options** ⇨ **Printers** page.

In the **Printers** page, you have the following options:



1.Default label software: The drop down list to select a default label printer software. The options are: AnyLabel and EasyPrint.

2.Default label printer: The drop down list to select a default label printer. The printers are installed though Windows Control Panel. Please refer to Windows manual for further instructions for printer installation.

3.Default number of copies: The drop down list to select a default number of copies printed.

4.Default label layout: The drop down list to select a default printing label layout. The printing labels are managed label software selected on the section (1). Please refer to label software manual for further instructions on how to create a label template.

5.Import folder: The folder to import the database. Use the button to search and select the folder.

6.Export folder: The folder to export the database. Use the button to search and select the folder.

7.Site export folder: The folder to export the local database. Use the button to search and select the folder.

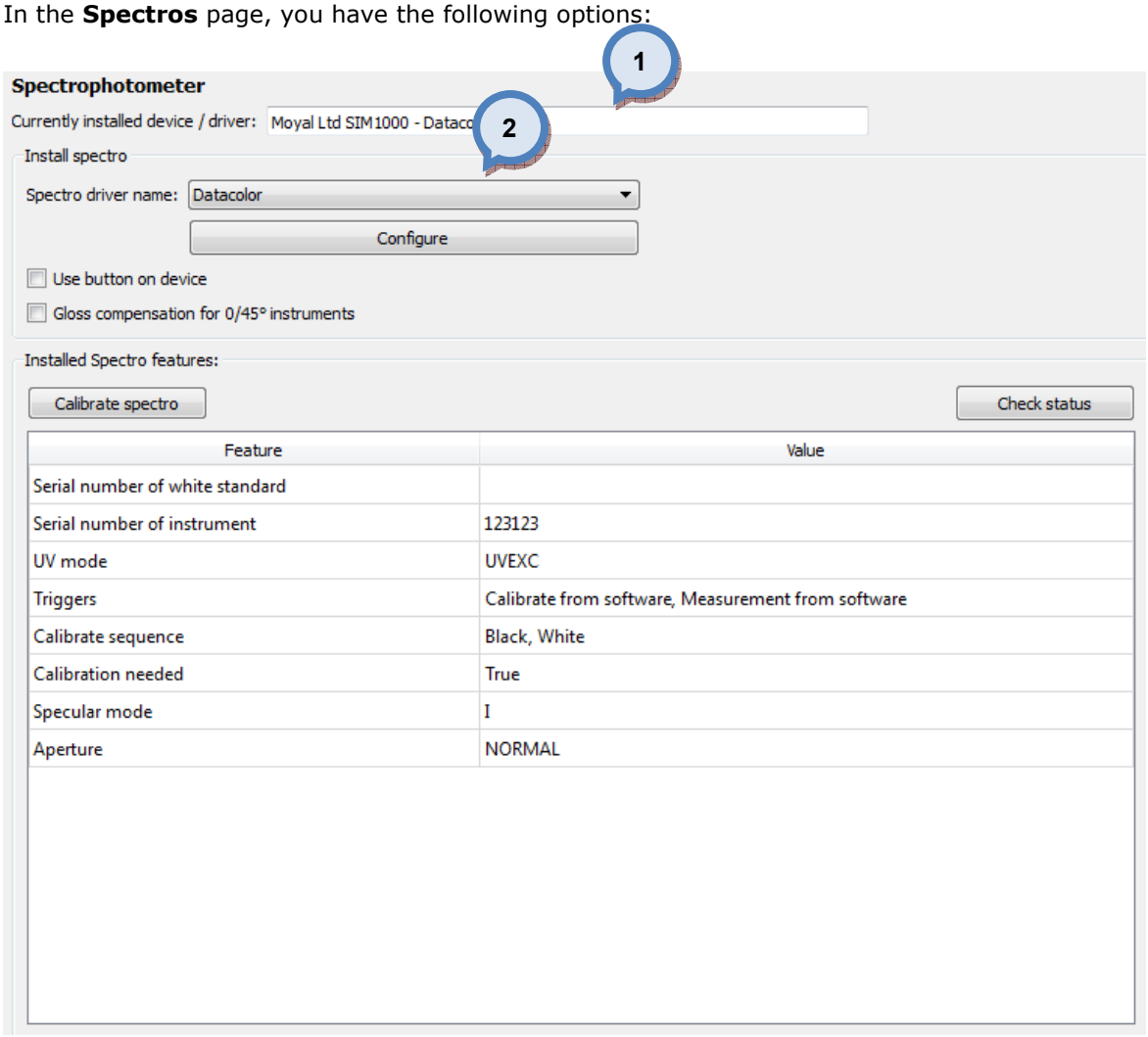
8.Flink-inbox file: The file and the folder for the Flink file. Use the button to search and select the folder.

9.Export package default name: Text field to change the default name used in Export functions. See management & Analysis – Export-Import section.

5.3 Spectros

To install spectrophotometer options, navigate into the **Options** ⇨ **Spectros** page.

In the **Spectros** page, you have the following options:



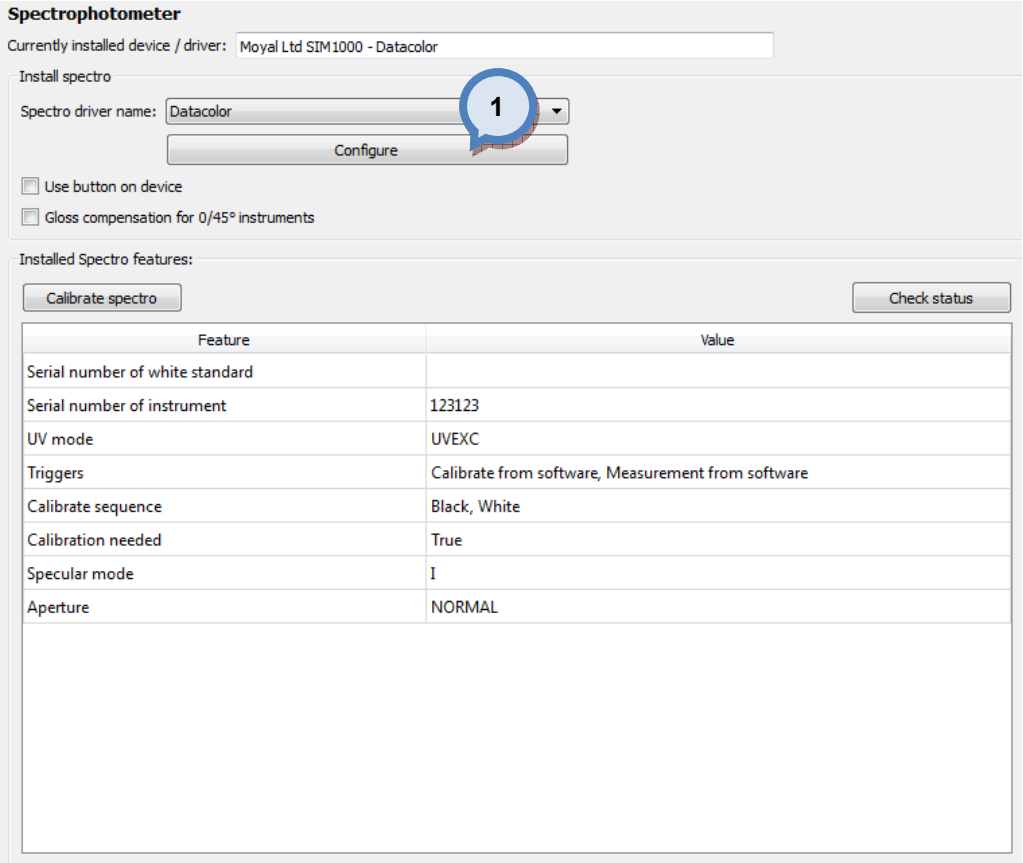
1.Currently installed device / driver: The name of the currently installed spectrophotometer and the drive for one.

2.Spectro driver name: The drop down list to select a driver for a spectrophotometer. Options are:

- Datacolor

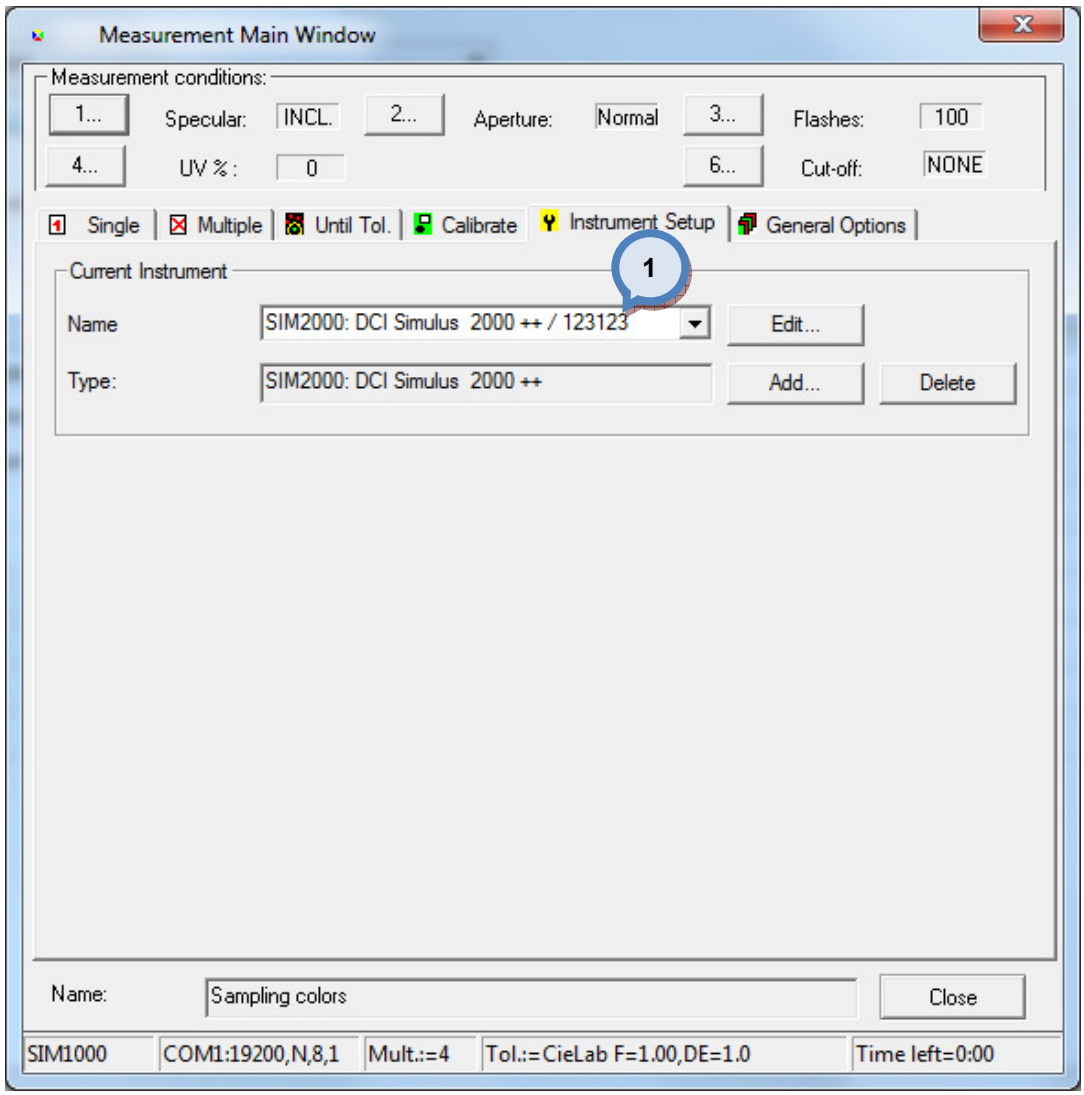
- X-rite

When **Spectro driver name "Datacolor"** is selected in the **Spectros** page, you have the following options:



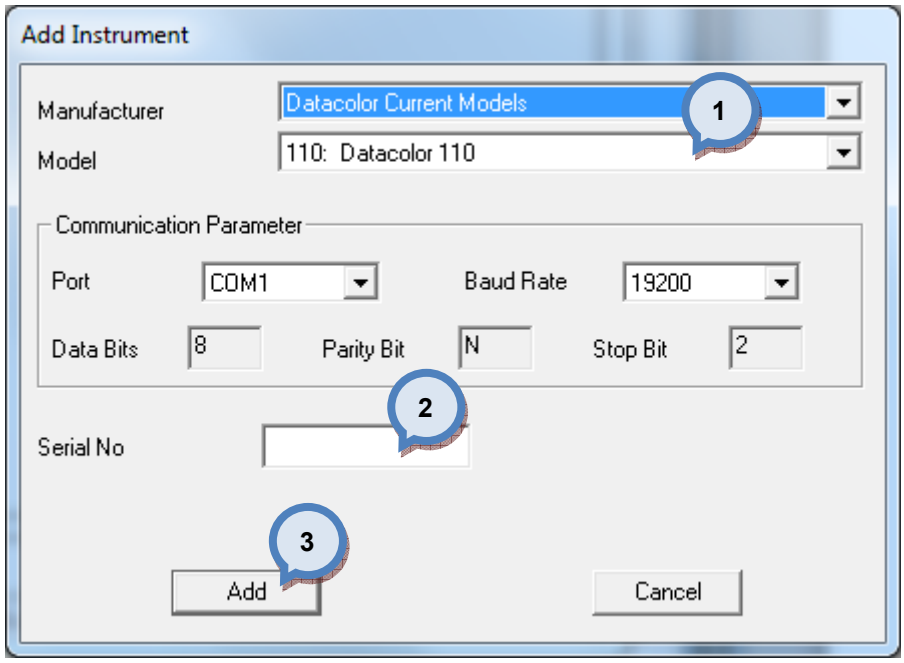
1.Confiqure: The button to configure an installed spectrophotometer.

When the **Configure** button is clicked in the **Spectros** page, you have the following options:



1.Name: The drop down list to select a spectrophotometer type.

When the **spectrophotometer type** is selected in the **Spectros** page, you have the following options:

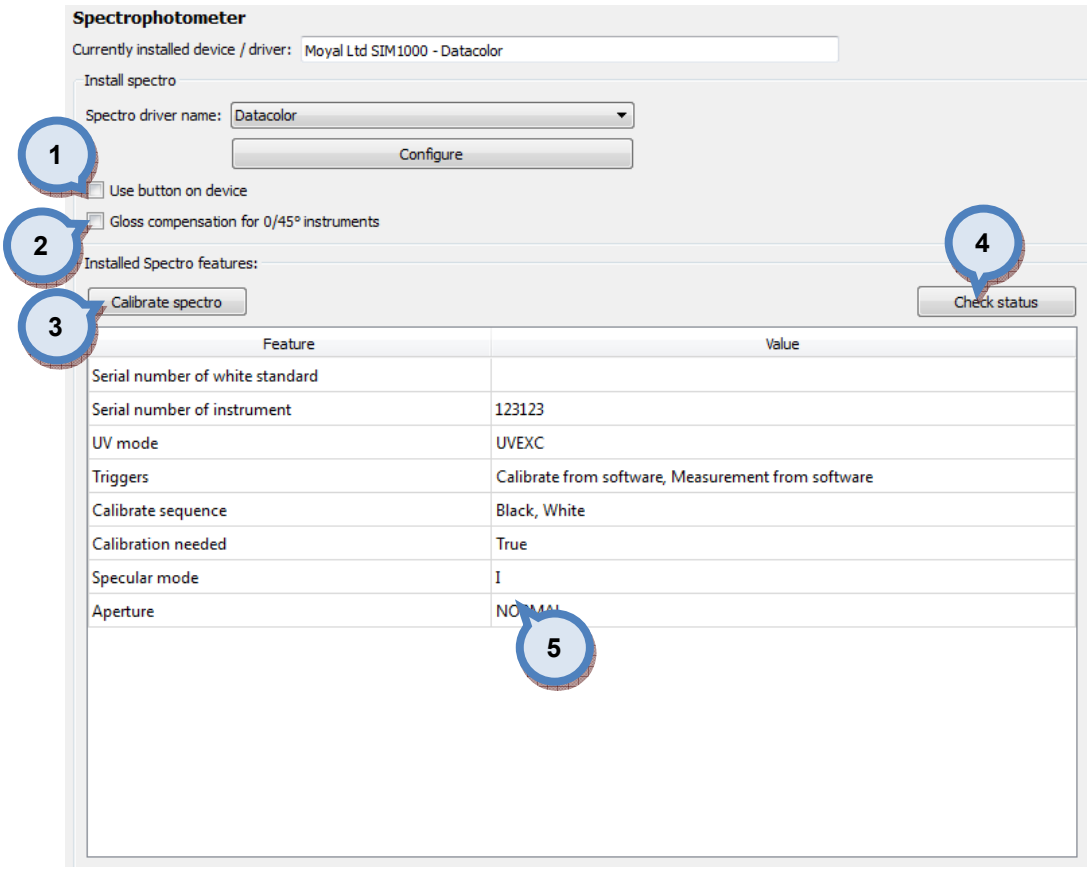


1.Manufacturer/Model: The drop down lists to select a spectrophotometer type manufacturer and the Model.

2.Serial no: The text field to enter the serial number of the spectrophotometer.

3.Add: The button to proceed with the installation.

When the **spectrophotometer is installed,** in the **Spectros** page, you have the following options:



1.Use button on device: When the check box is enabled, the buttons in the spectrophotometer can be used. Othervise, the spectrophotometer is operated only by the software.

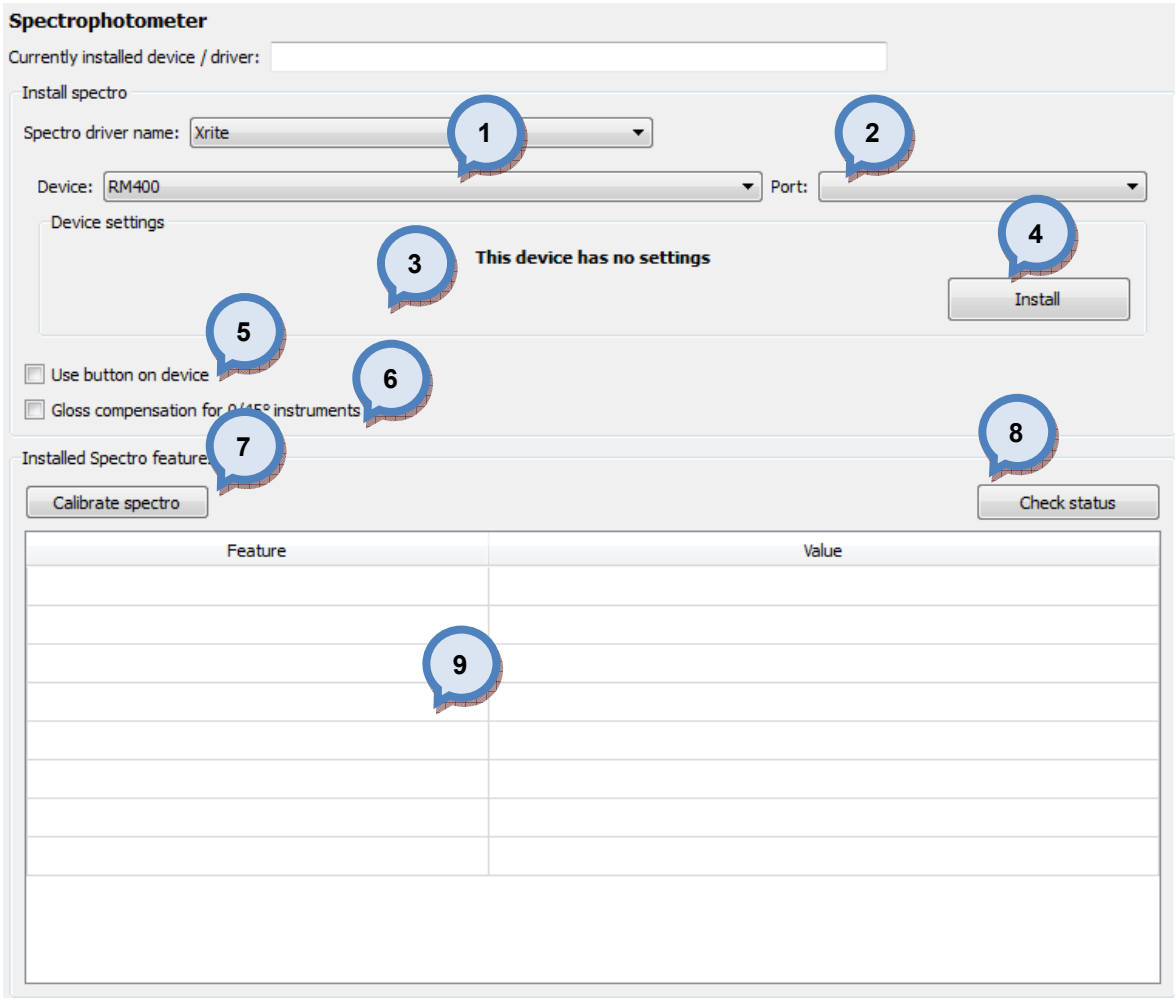
2.Gloss compensation for 0/45 instruments: When the check box is enabled, gloss compensation is used. This function will minimize the measurement differences between different equipments on the favour of the sphere measurement type.

3.Calibrate spectro: The button to calibrate an installed spectrophotometer.

4.Check status: The button to check the status of the installed spectrophotometer.

5.The list of the spectrophotometer features and values of those.

When **Spectro driver name "XRite"** is selected in the **Spectros** page, you have the following options:



1.Device: Drop down list to select device

2.Port: Port where spectro is connected to.

3.Device settings: area to show possible device settings

4.Install: The button to set device into use with selected settings.

5.Use button on device: When the check box is enabled, the buttons in the spectrophotometer can be used. Otherwise, the spectrophotometer is operated only by the software.

6.Gloss compensation for 0/45 instruments: When the check box is enabled, gloss compensation is used. This function will minimize the measurement differences between different equipments on the favour of the sphere measurement type.

7.Calibrate spectro: The button to calibrate an installed spectrophotometer.

8.Check status: The button to check the status of the installed spectrophotometer.

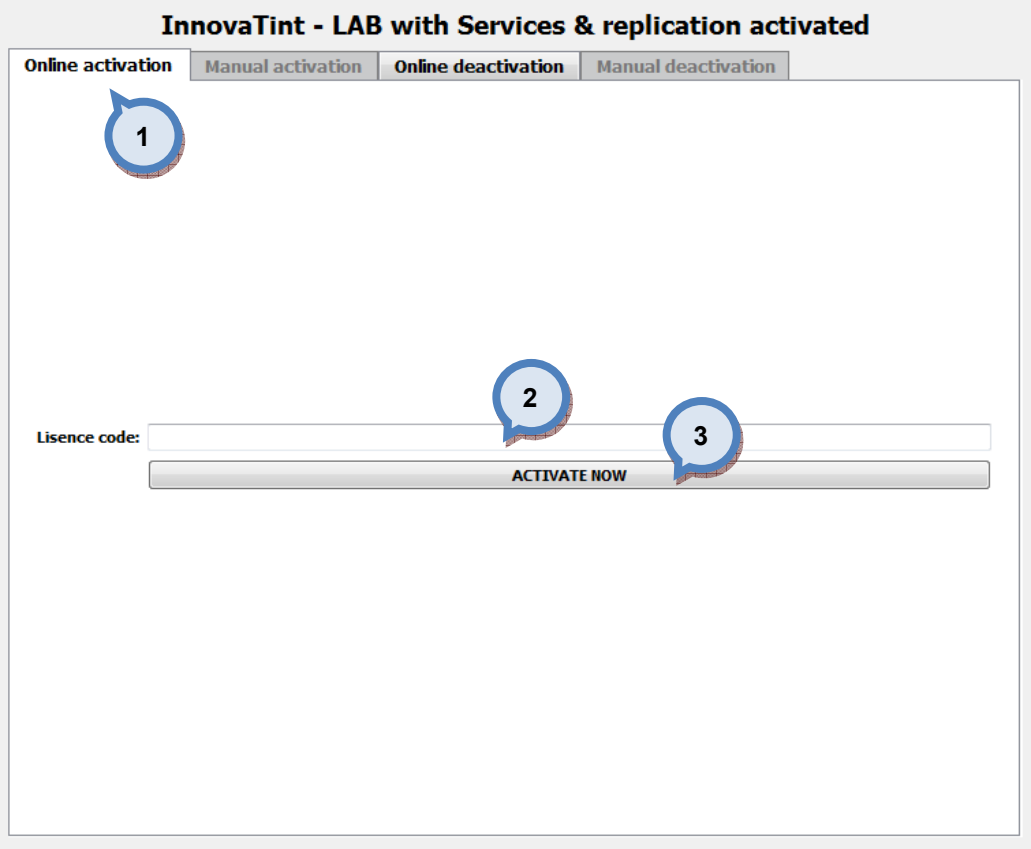
9.The list of the spectrophotometer features and values of those.

5.4 Activation

To activate or de-activate your software, navigate into the **Options** ⇨ **Activation** page.

On this section you can activate your software with internet service (this function requires internet access on the computer this software is installed on), or you can use manual activation, which can be handled other PC having internet access. Likewise, you can deactivate your software with internet service or manually.

In the **Online activation** tab page of the **Activation** window, you have the following options available:

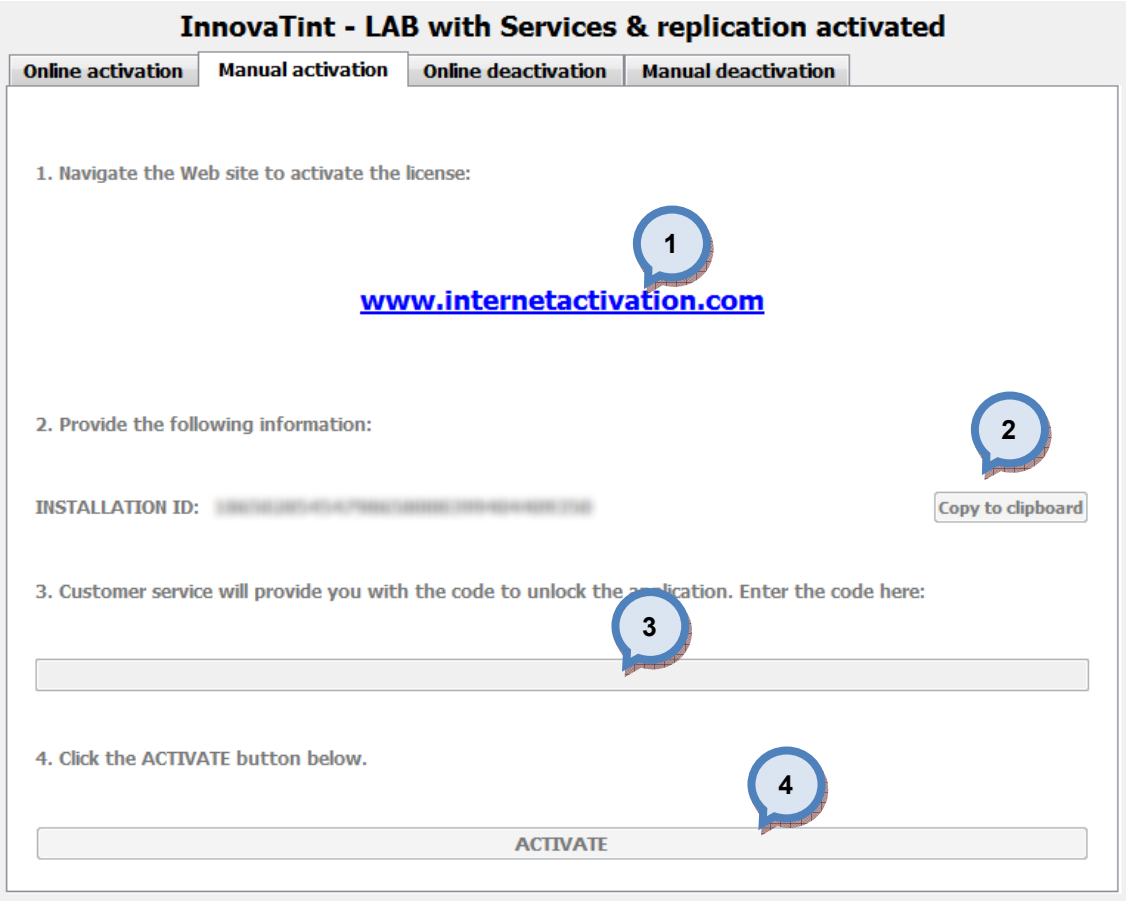


1.Select **Online activation** tab page

2.Enter **license code** obtained during purchase of software

3.Click **ACTIVATE NOW** button

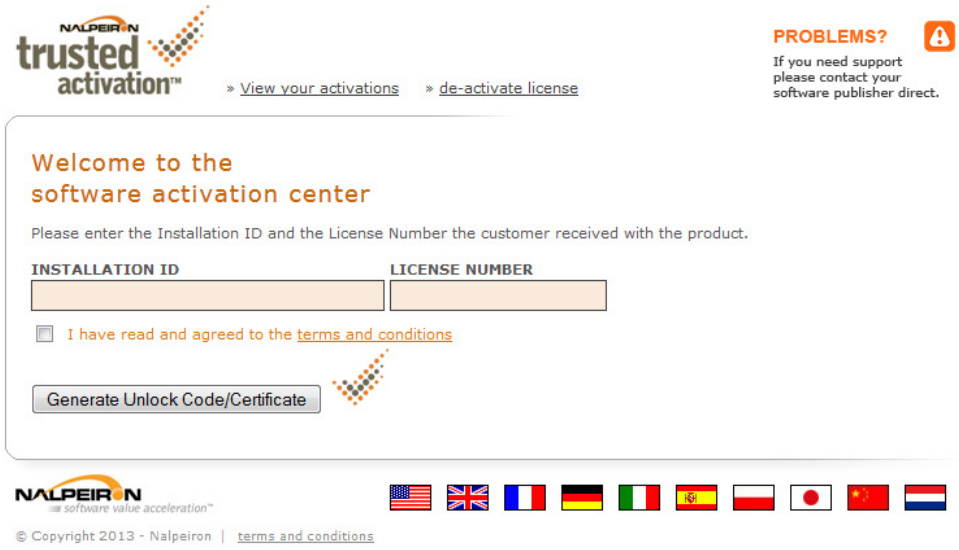
In the **Manual activation** tab page of the **Activation** window, you have the following options available:



1.The link to the activation web-page.

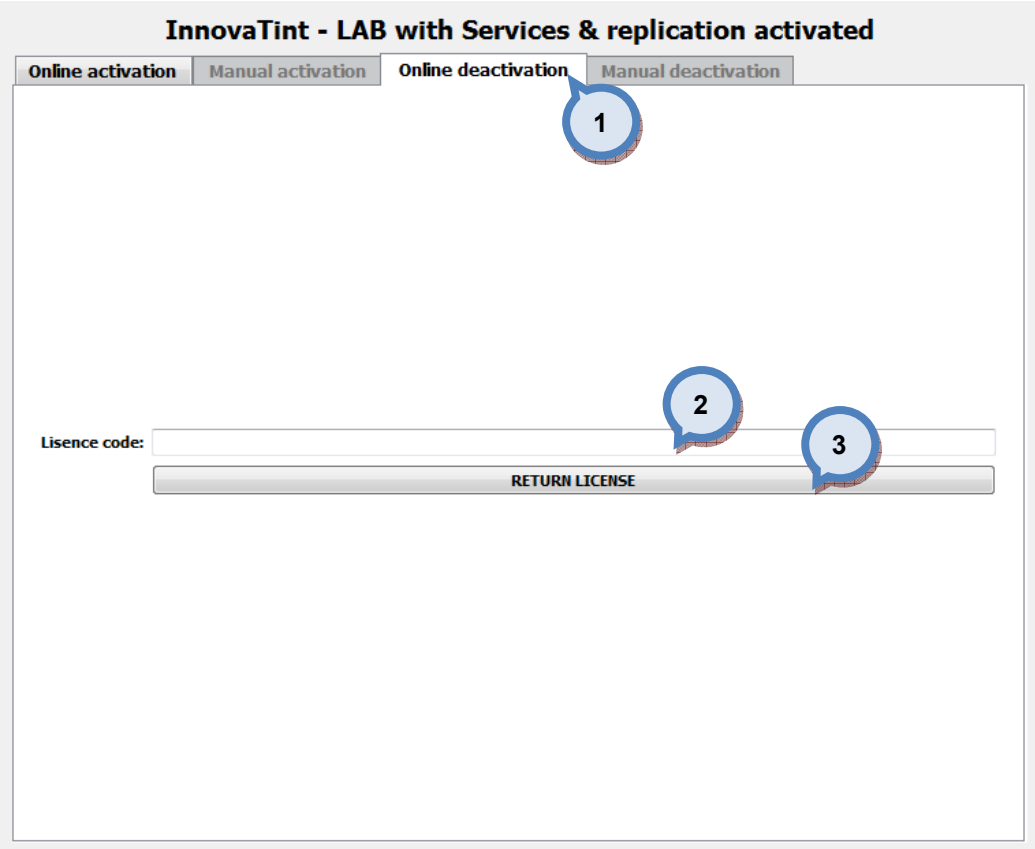
2.Copy to clipboard: The button to copy the installation ID to the clipboard, and to somewhere where it's easy to access on remote PC.

3.The text field to enter the activation code obtained from the web-page.



4.ACTIVATE: The button to activate the software when activation code is entered in to the field (3).

In the **Online deactivation** tab page of the **Activation** window, you have the following options available:

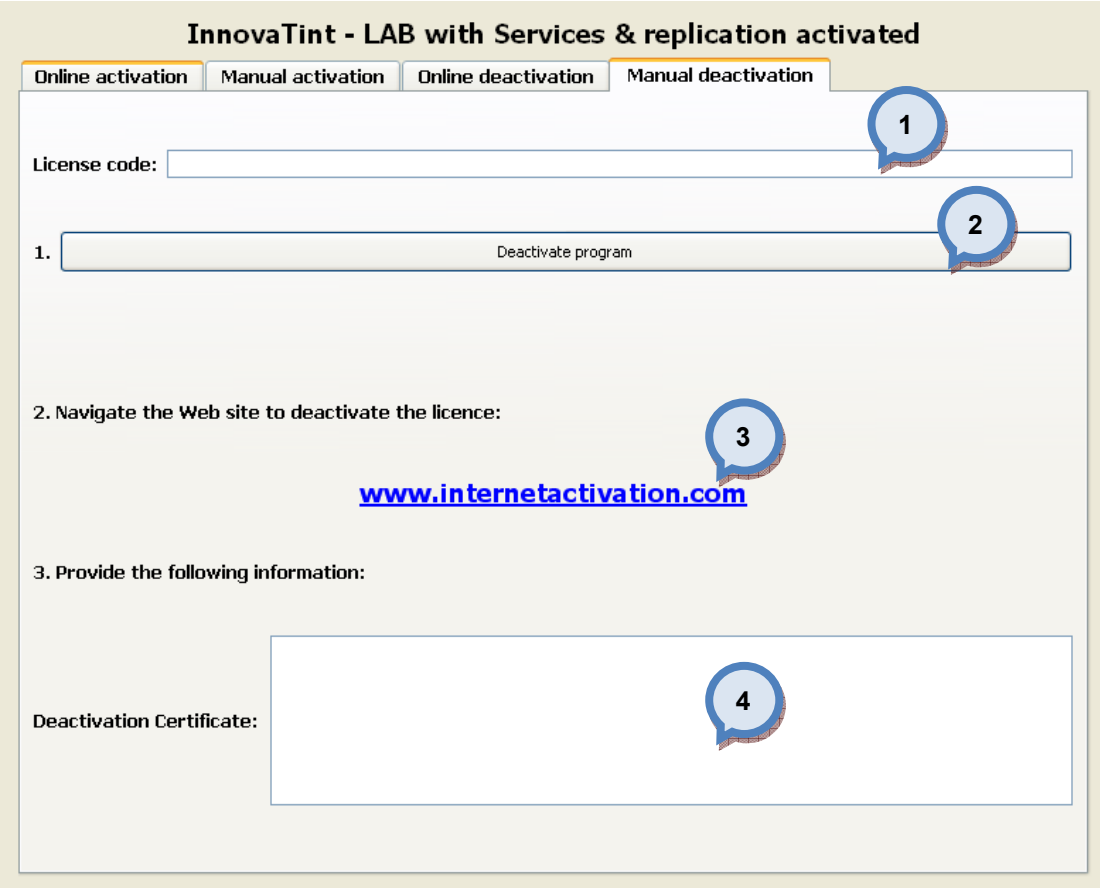


1.Select **Online deactivation** tab page

2.Enter **license code** obtained during purchase of software

3.Click **RETURN LICENSE** button

In the **Online deactivation** tab page of the **Activation** window, you have the following options available:



1.License code: The text field to display the license code.

2.Deactivate program: The button to deactivate the program.

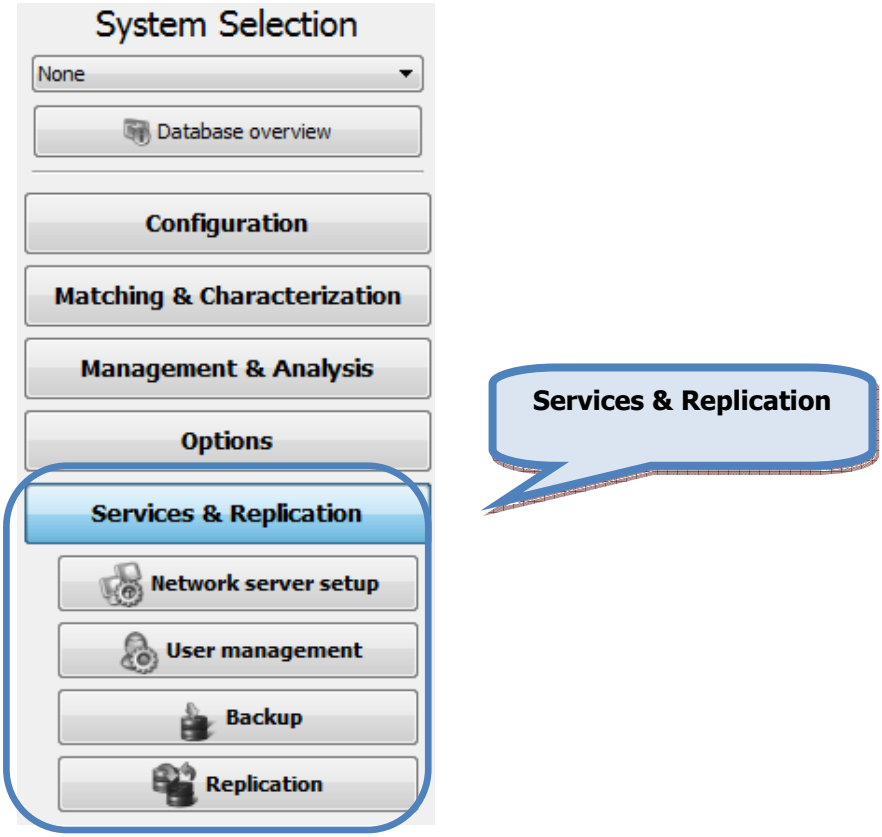
3.The link to the de-activation web-page.

4.Deactivation Certificate: The text field to display the deactivation certificate.

6 Services & Replication

Services & Replication section has four sub pages, where you can:

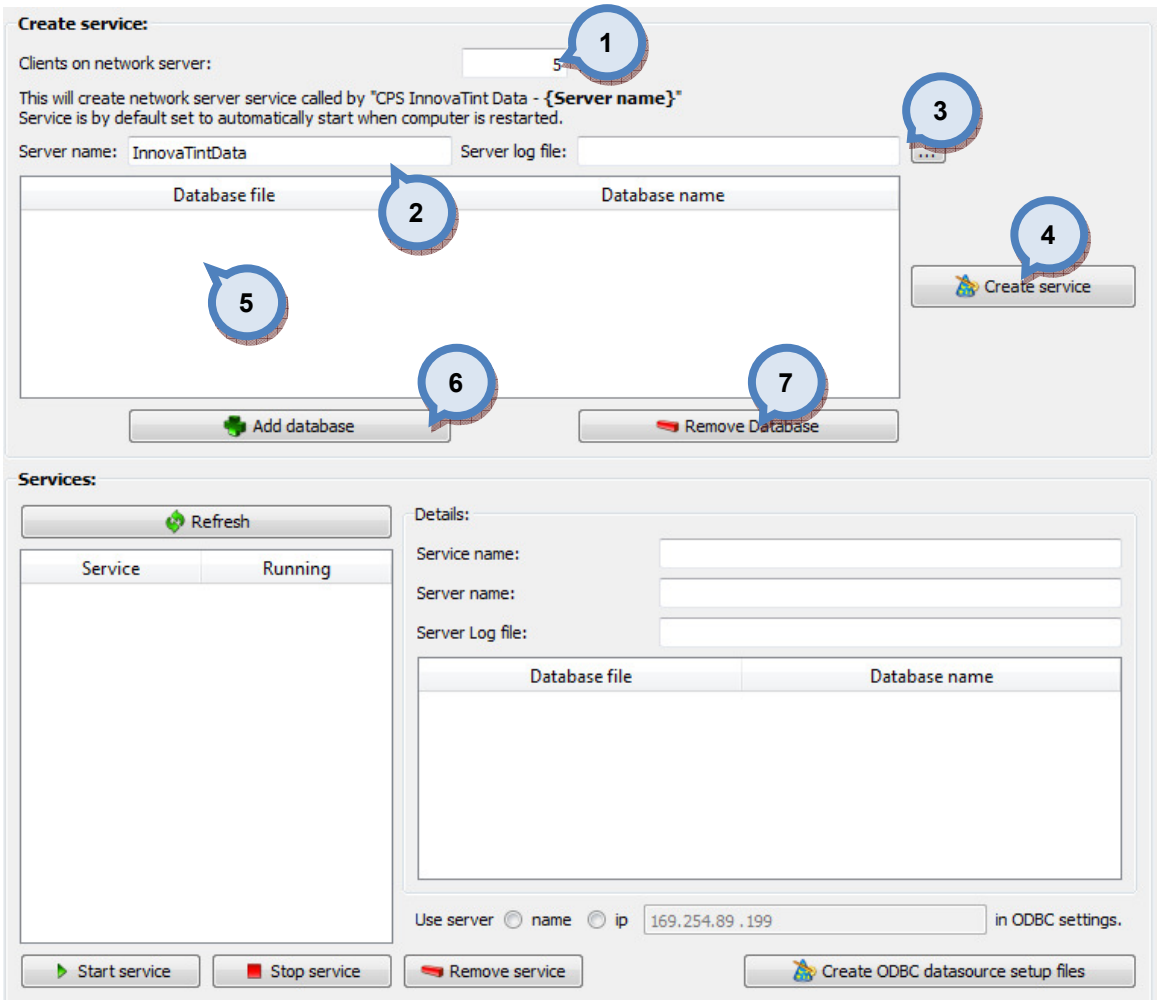
- Set network server settings
- Manage users and their passwords and access rights
- Make backups of your database
- Set replication settings



Note: When making changes to the settings in this section, user need to login in to the program as an administrator in order to set all options active. (right click the InnovaTint LAB icon and select "run as administrator").

6.1 Network server setup

In the **Create service** section of the **Network server setup** page, you have the following options available:



1.Clients on network server: The number of clients on the network server.

2.Server name: The name of the network server.

3.Server log file: The file name and path of the server log file. Use the ... button to select the log file.

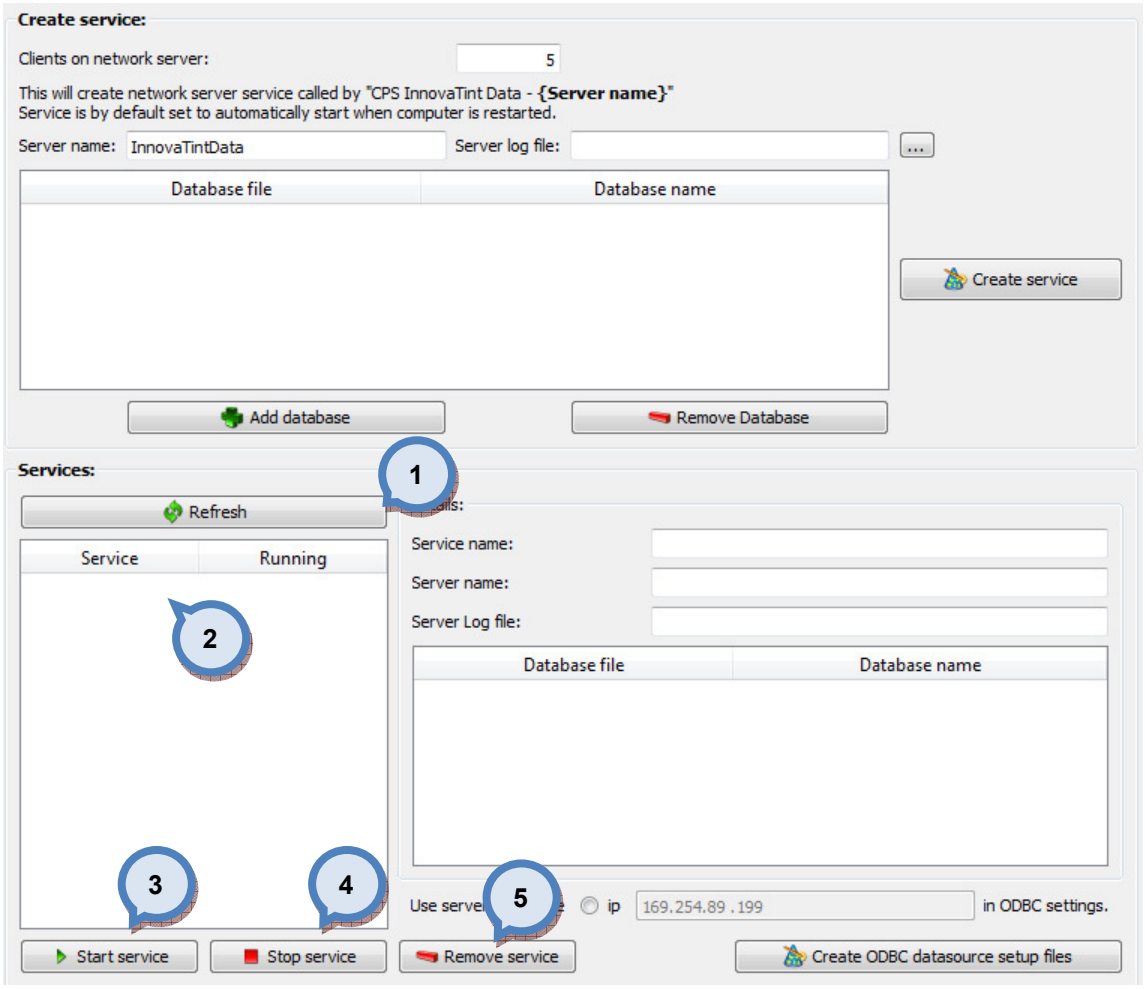
4.Create service: The button to create a service.

5.The list of the database files and the corresponding database base names.

6.Add database: The button to add a new database

7.Remove database: The button to remove a selected database.

In the **Service** section of the **Network server setup** page, you have the following options available:



1.Refresh: The button to refresh the list of the services on the field (2).

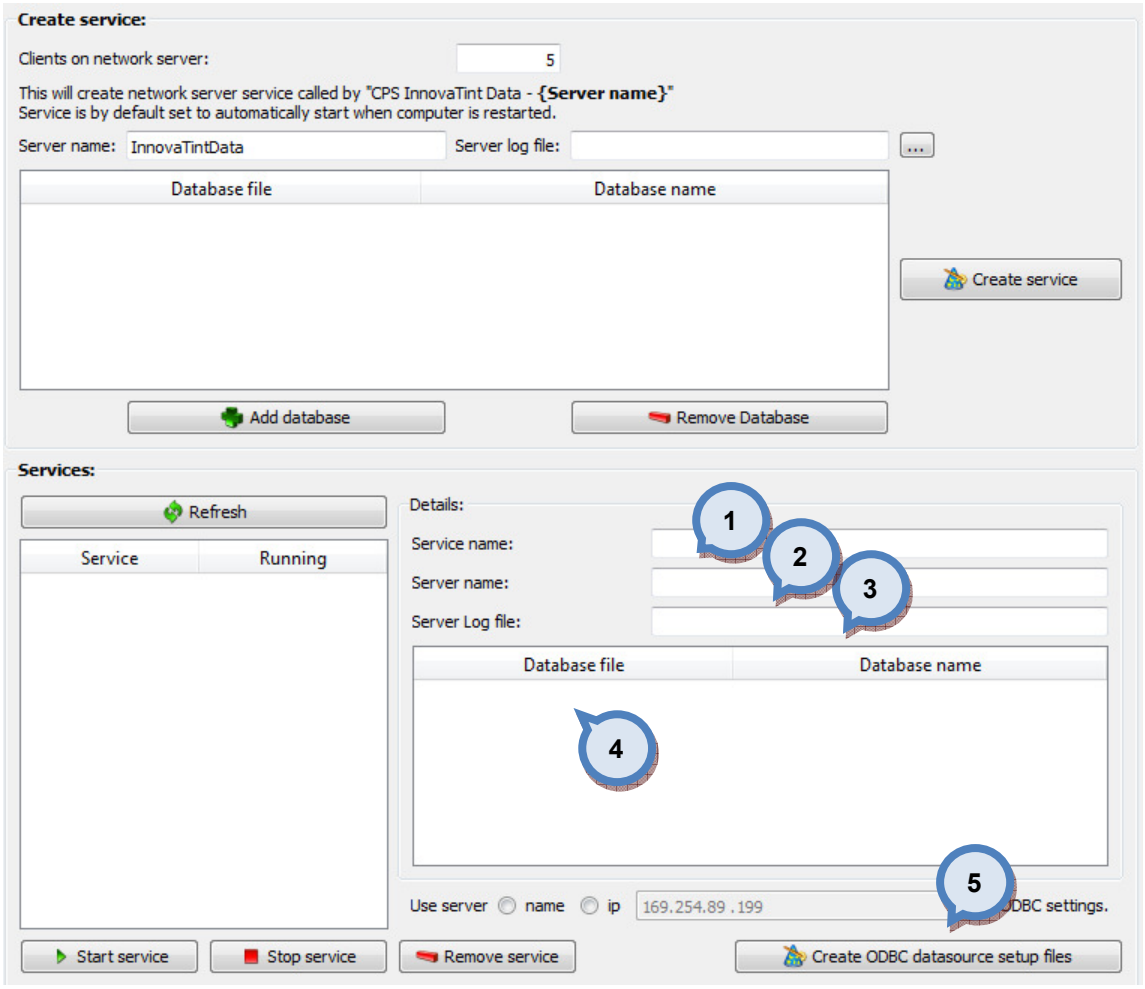
2.The list of the Services and the indicator whether service is running or not.

3.Start service: The button to start a selected service.

4.Stop service: The button to stop a selected service.

5.Remove service: The button to remove a selected service.

In the **Details** section of the **Network server setup** page, you have the following options available, when a service is selected from the Services list:



1.Service name: The name of the selected service.

2.Server name: The name of the server of the selected service.

3.Server log file: The name of the log file of the selected service.

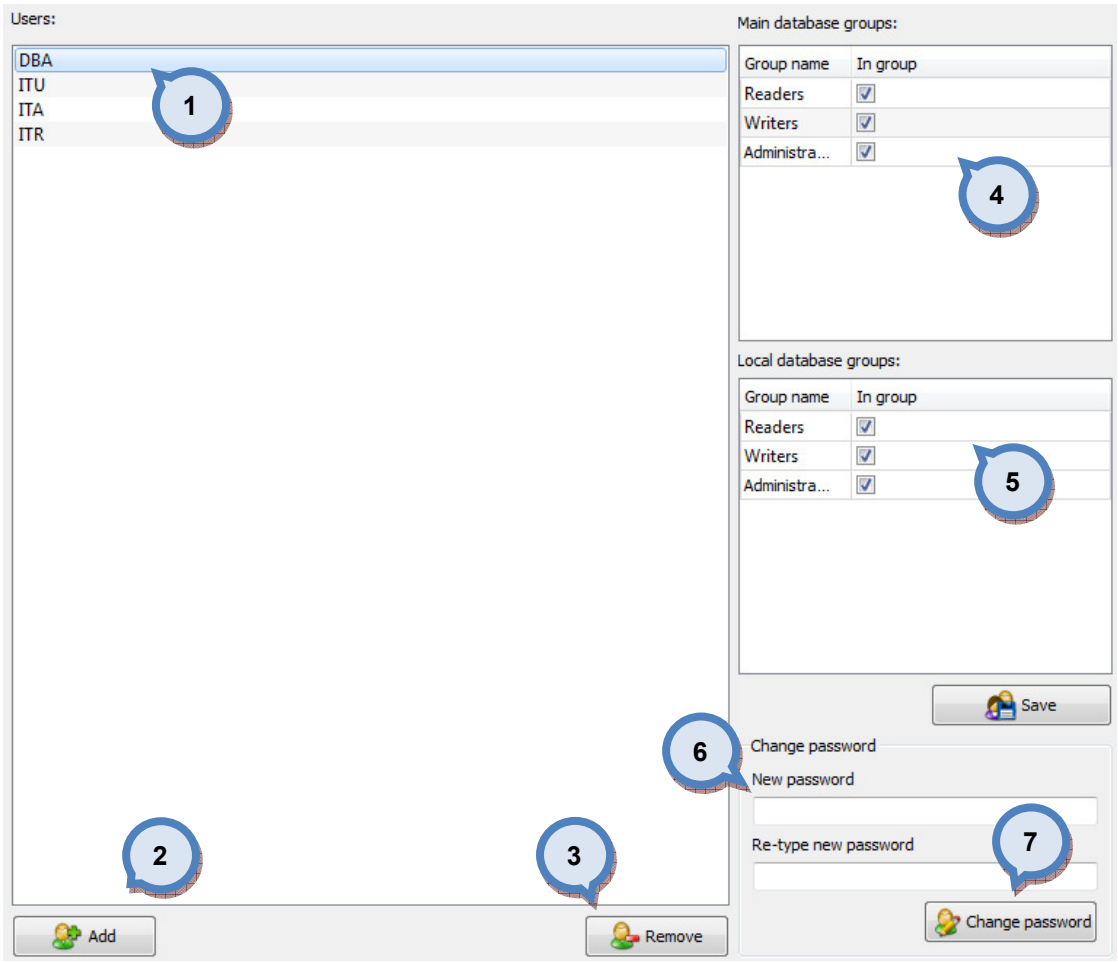
4.The list of the database files and corresponding database names.

5.Create ODBC datasource setup files: The button to create ODBC data source setup files for the client in the network.

6.2 User management

To manage user settings, navigate into the **Options ⇨ User management** page.

In the **User management** page, you have the following options available:



1.Users: The list of users already in the system.

2.Add: The button to create a new user.

3.Remove: The button to remove a selected user.

4.Main database groups: The list of the groups in main database. Groups available are: Readers (view formulas), writers (create new formulas), and administrator (edit products, and systems).

5.Local database groups: The list of the groups in local database. Groups available are: Readers, Writers, and Administrator.

6.Change password: The text fields to type in the new password. New password has to be re-typed in to Re-type new password field. Password is case sensitive.

7.Change password: The button to change password after it has been typed into the field (6).

6.3 Backup

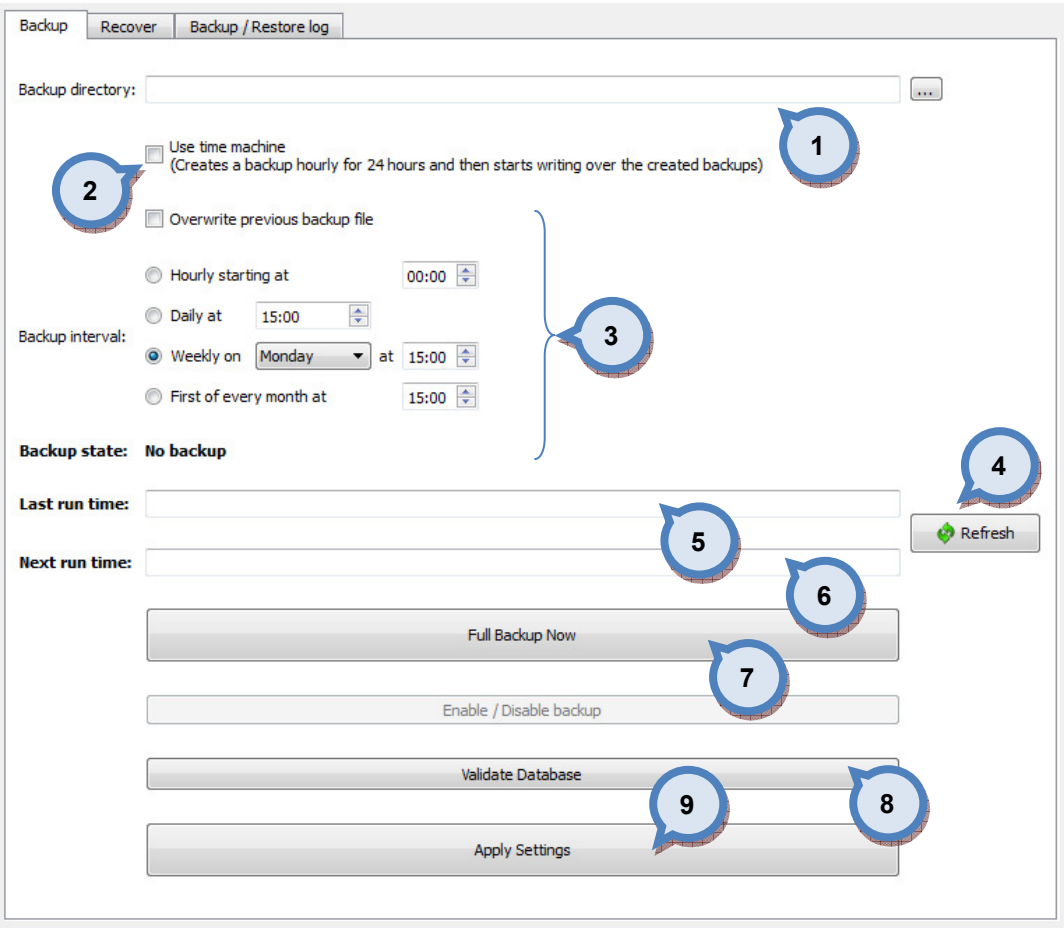
To make database backups, navigate into the **Options ⇨ Backup** page.

In backup page you can:

- Make backup in database you are working with
- Restore previously made database
- view backup logs

There are three tab pages on this section; **Backup, Recover** and **Backup/Restore log**.

In the **Backup** tab page of the **Backup** window, you have the following options available:



1.Backup directory: The folder for the backup file. Use ... button to search the folder.

2.Use time machine: The button to set up a automated backup file handling. This function stores latest 24 database backup files in network server and, therefore, save disk space.

3.Backup interval: The settings for the backup timing.

Hourly starting at: Set time to the selector field on when the first backup is made. Next back up is made in every hour until 24:00.

Daily at: Set time to the selector field on when backup is made on every day.

Weekly on: Set weekday and time to the selector fields on when the back up is made every week.

First of every month at: Set time to the selector field on which time back up is made on the first day of every month.

4.Refresh: The button to refresh items (5) and (6).

5.Last run time: The field to display the latest backup run.

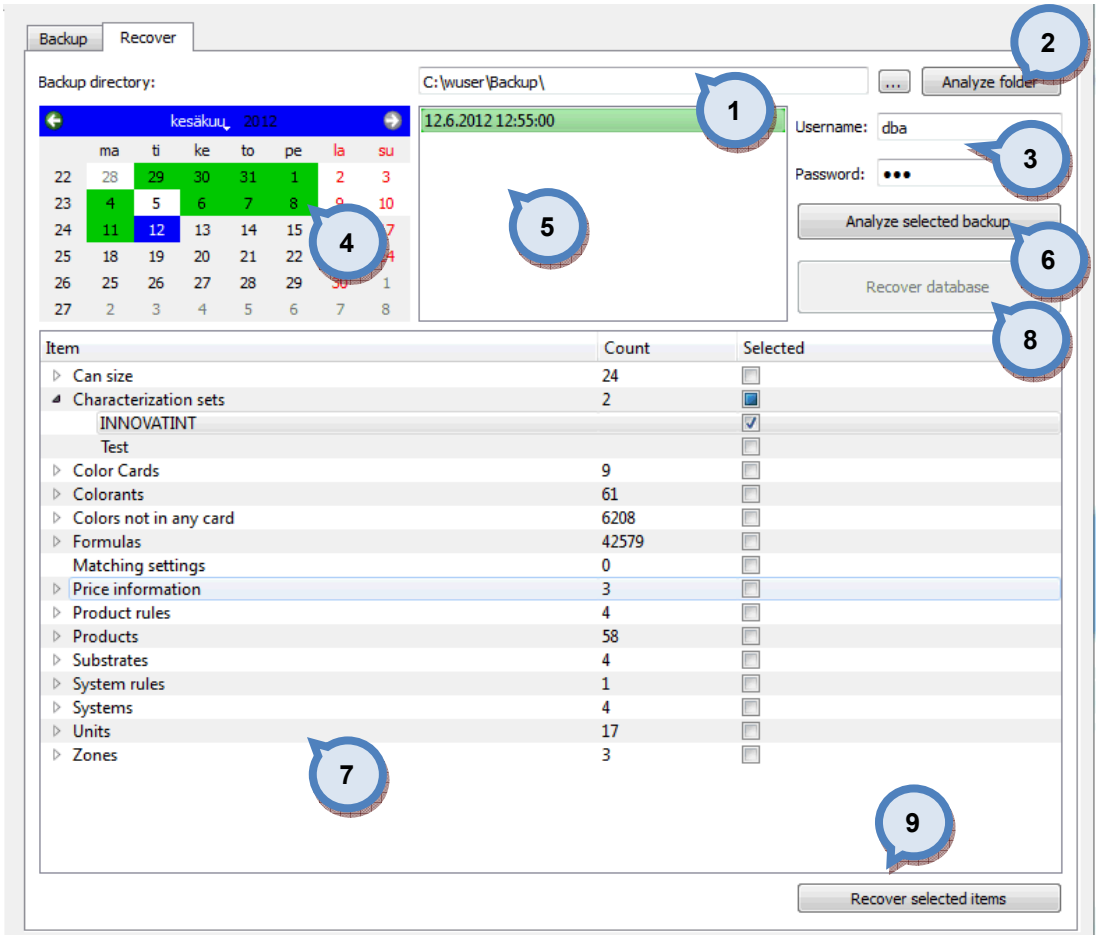
6.Next run time: The field to display the next scheduled backup run.

7.Full backup Now: The button to run full backup immediately.

8.Validate database: The button to execute the database validation.

9.Apply Settings: The button to save backup timing settings.

In the **Recover** tab page of the **Backup** window, you have the following options available:



1. Backup directory: The folder for the backup file. Use ... button to search the folder.

2.Analyse folder: The button to search selected folder to find a backup file. The dates on which the backup file is found are shown at the calendar (6) with green background.

3.Username/Password: The fields to input a username and password for the backup database.

4.Calendar: The calendar to show dates (with the green background) on whch the backup file is available.

5.The table to display the backup file(s) and times of the selected date (the date selected from the calendar (4)).

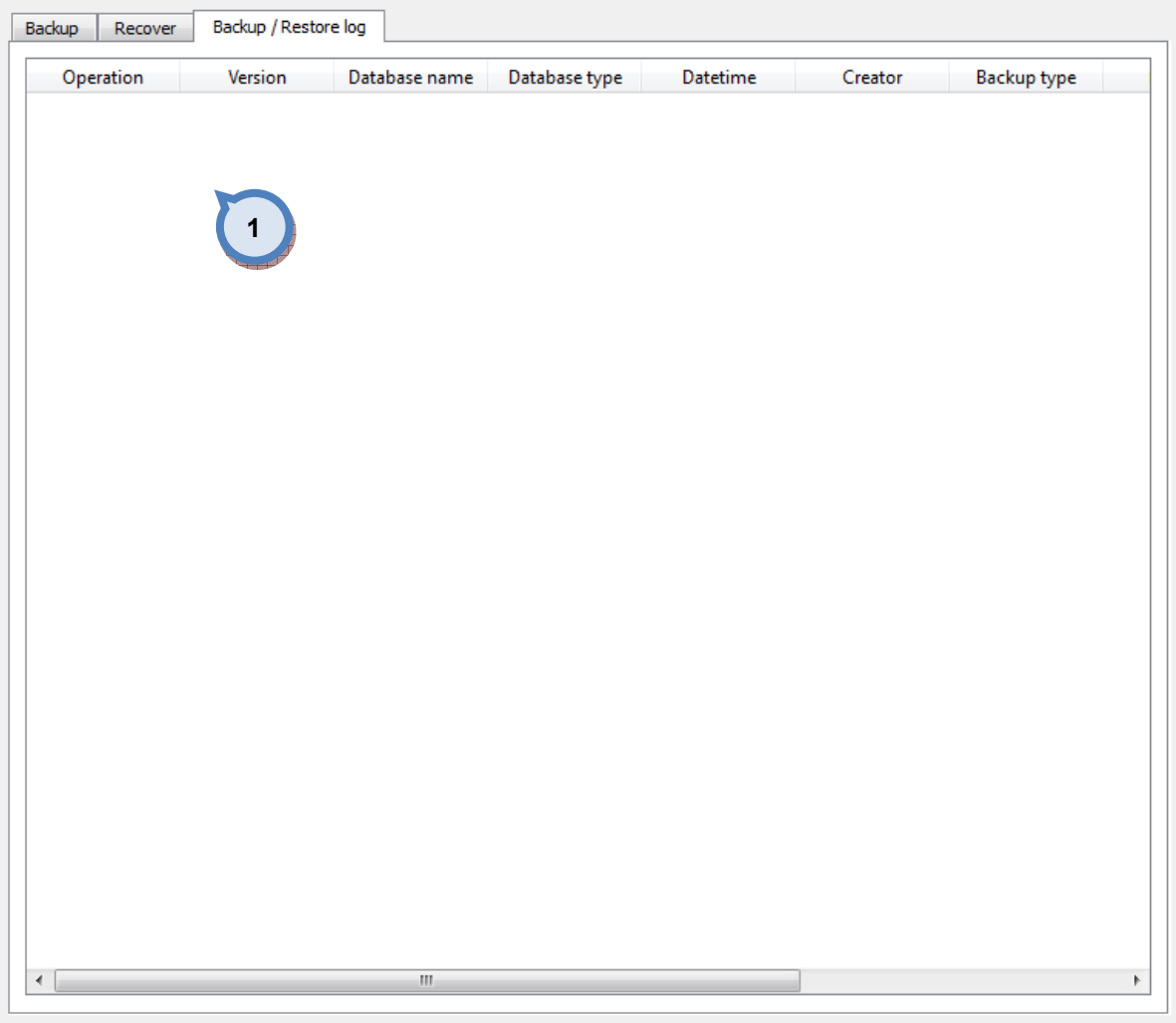
6.Analyse selected backup: The button to analyse selected backup file. Items will be displayed in the table (7).

7.Item/Count: The table to display the content of the backup file(s) (6).

8.Recover database: The button to replace current database with the selected backup database. **note:** only the "green"-flagged backups do not interfere replication.

9.Recover selected items: The button to replace selected items from the current batabase.

In the **Recover** tab page of the **Backup** window, you have the following options available:



1. table to display content of the log files.

6.4 Replication

To setup database replication, navigate into the **Options ⇨ Replication** page.

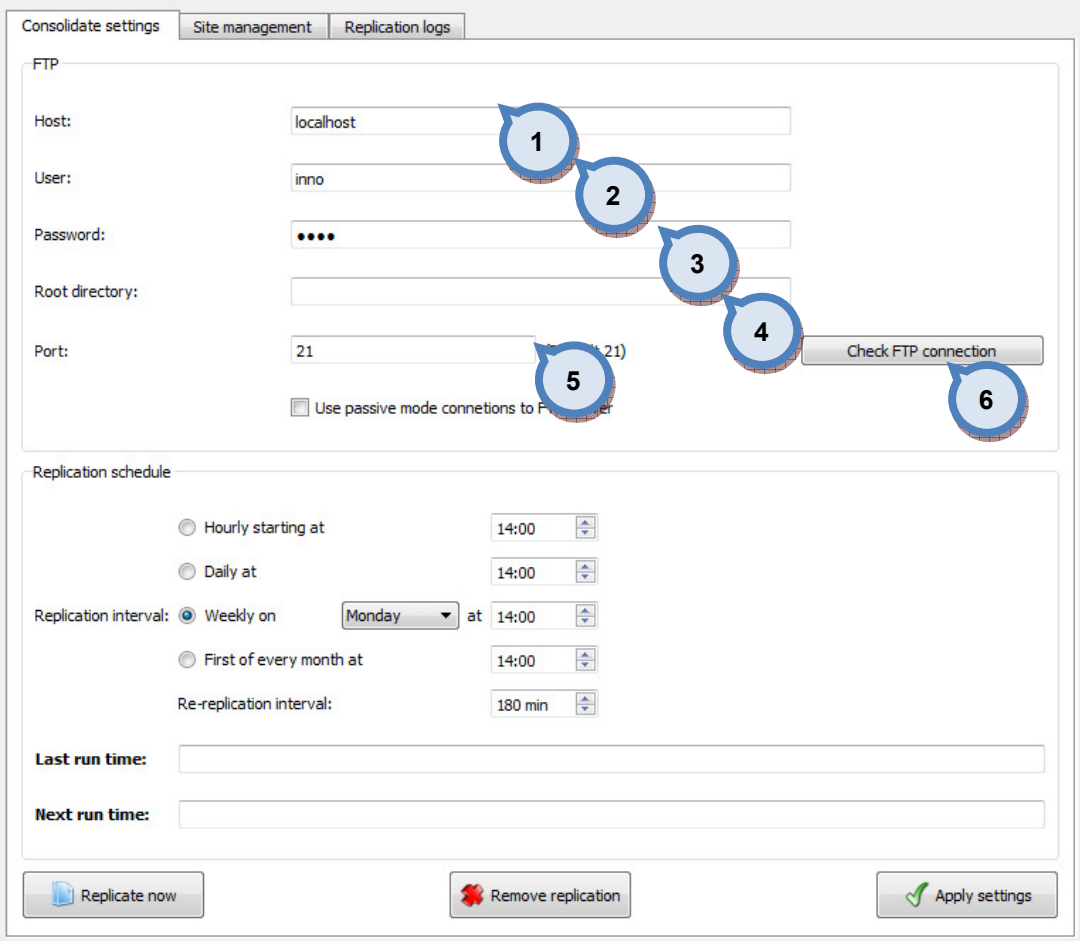
On this page, you have three tab pages:

- Consolidate settings
- Site management
- Replication log

In **Consolidate settings** tab page you can:

- Set server settings
- Set replication frequencies
- Execute replication immediately

In the **FTP** section of the **Consolidation settings** tab page of the **Replication** page, you have the following options available:



1.Host: The field to input the host name.

2.User: The field to input the user name.

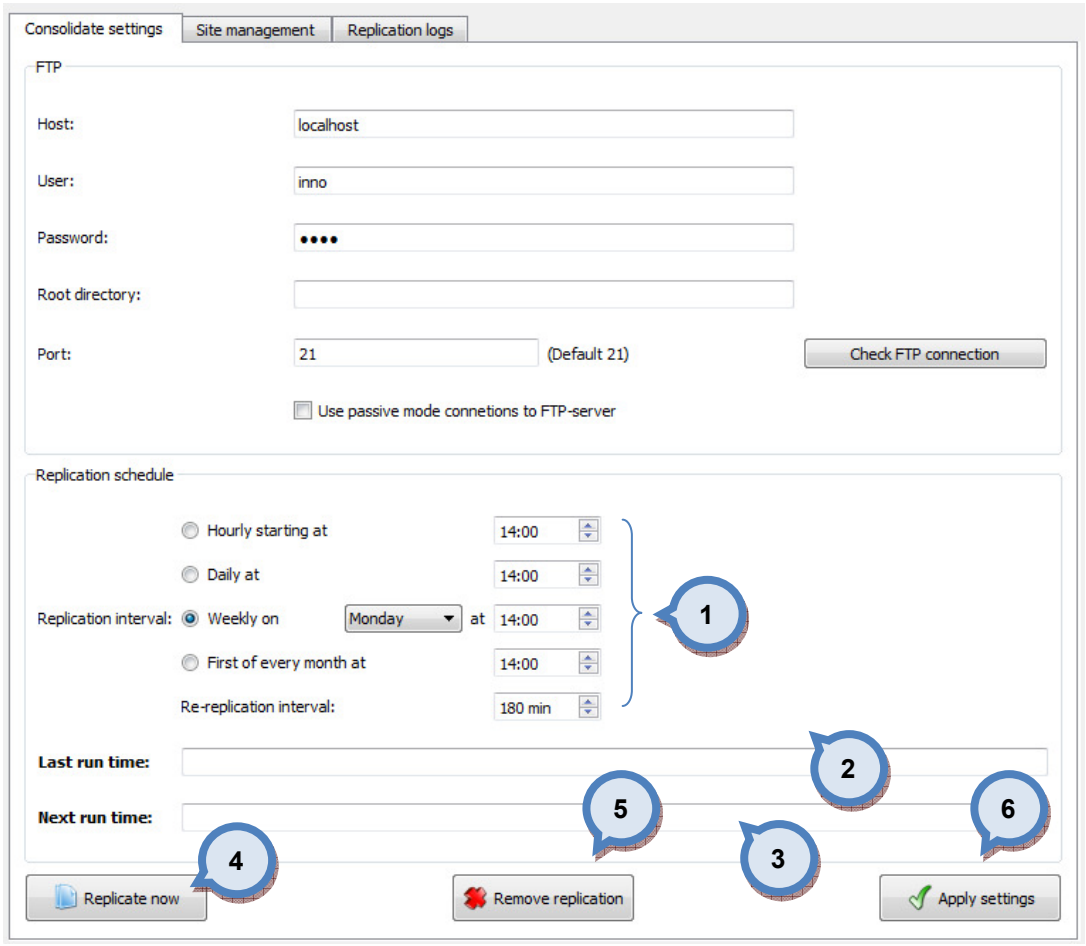
3.Password: The field to input the user password.

4.Root directory: The field to input the root directory.

5.Port: The field to input the port (default port is 21)

6.Check FTP connection: The button to check the FTP connection. Setting on the points 1-5 has to be made before checking the connection.

In the **Replication schedule** section of the **Consolidate settings** tab page of the **Replication** page, you have the following options available:



1.Replication interval: The time settings for replication.

Hourly starting at: Set time to the selector field on when replication is made on every hour.

Daily at: Set time to the selector field on when replication is made on every day.

Weekly on: Set weekday and time to the selector fields on when the replication is made every week.

First of every month at: Set time to the selector field on which time replicationis made on the first day of every month.

Re-replication interval: Set time to selector after how many minutes after replication the re-replication is made.

2.Last run time: The field to display the latest replication run.

3.Next run time: The field to display the next scheduled replication run.

4.Replicate now: The button to run replication immediately.

5.Remove replication: The button to remove the replication.

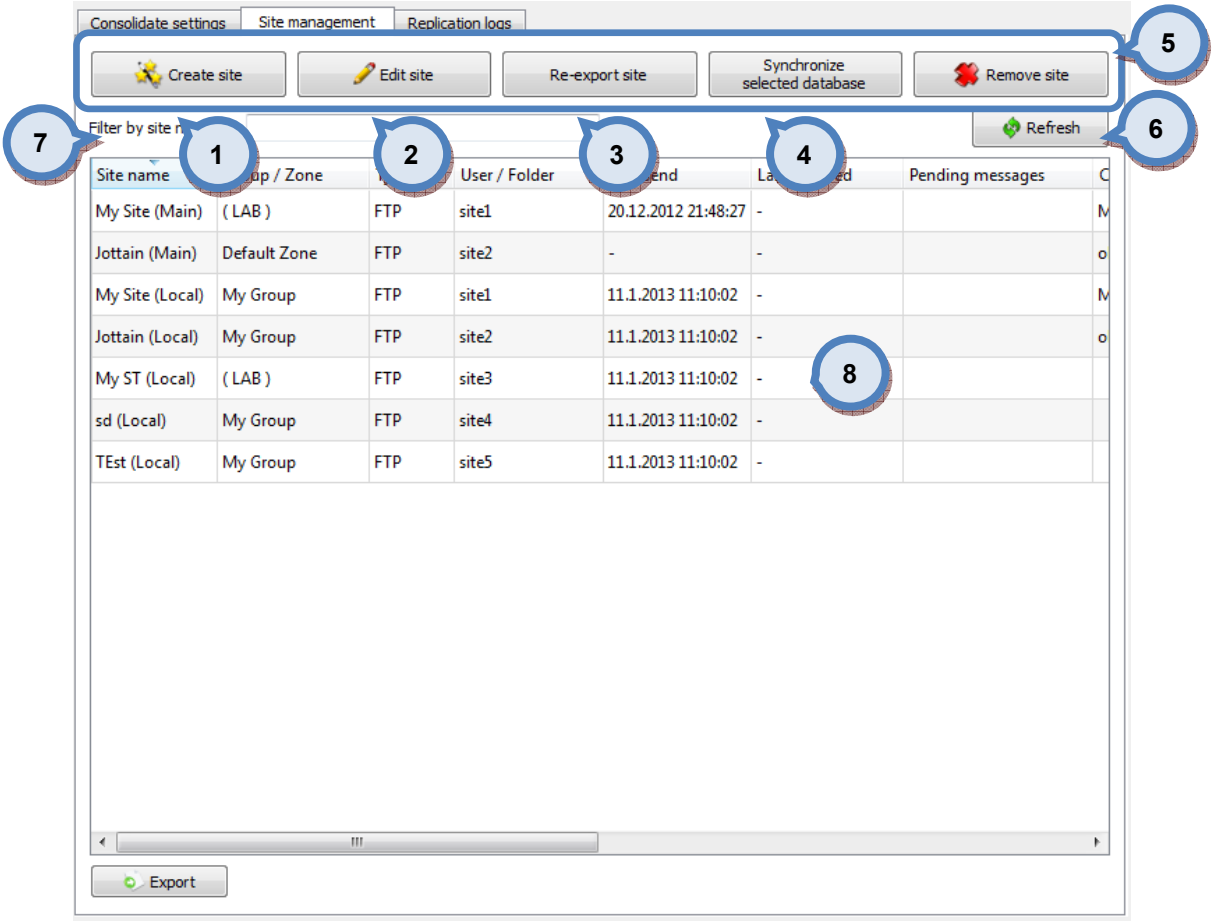
6.Apply settings: The button to save replication settings.

To set site management settings, navigate to **Site management** tab page.

In Site management tab page you can:

- Create new sites, and replication groups
- Synchronize site databases
- Remove sites

In the **Site management** tab page of the **Replication** page, you have the following options available:



1.Create site: The button to create a site.

2.Edit site: The button to enable site information editing function.

3.Re-export site: The button to re-export database information into the selected site.

4.Synchronize selected database: The button to compare existing database at the site and the database in the server and to fix the site database if any differences between those two. Server database information will over-rule the site database.

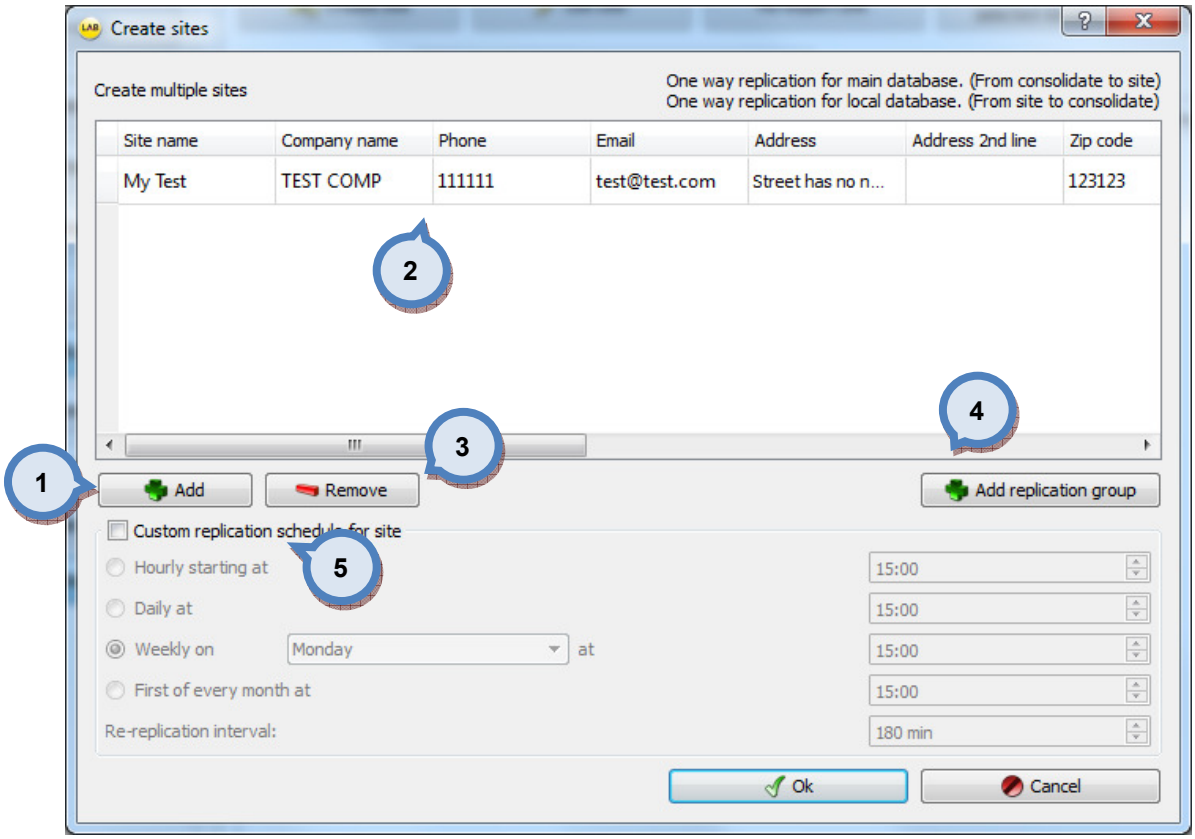
5.Remove site: The button to delete a site from the replication list.

6.Refresh: The button to refresh the table (8)

7.Filter: Text field to search by site name.

8.Table for all of the sites with replication information.

When the **Create site** –button has been clicked, a window is opened and following options available:



1.Add: The button to create new site(s).

2.Table to be filled with the new site information. Table consist following fields:

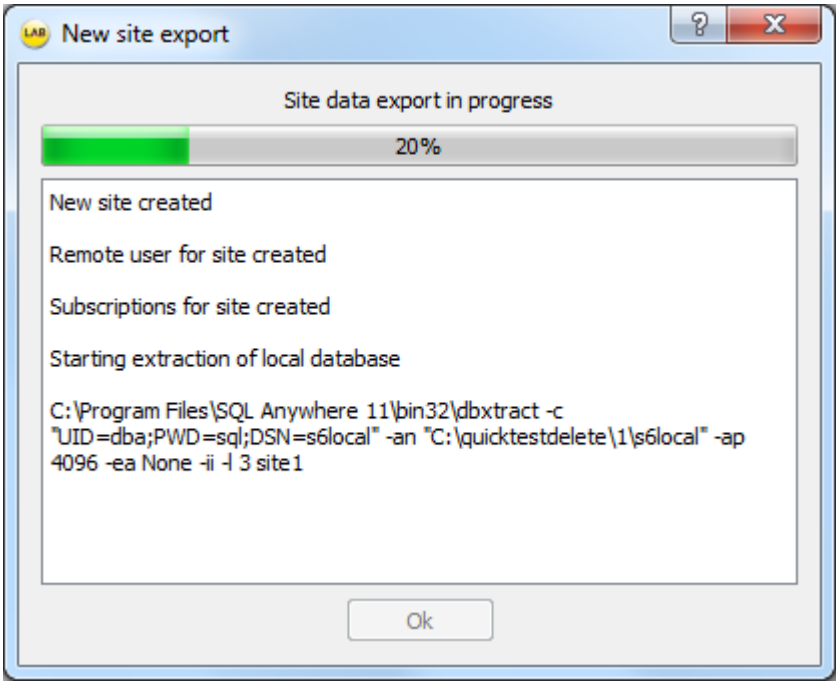
- Site name
- Company name
- Phone number
- E-mail
- Address
- Address line 2
- Zip code
- Country (2 characters)
- Site type: Dropdown list, options are SHOP and LAB
- Replication group: Dropdown list of available replication groups.
- Zone: Dropdown list of available zones.
- One way for main: checkbox to define type of data sharing for main database. Enabled = from consolidate to site.
- One way for local: checkbox to define type of data sharing for local database. Enabled = from site to consolidate.

3.Remove: The button to remove a new site from the table (2)

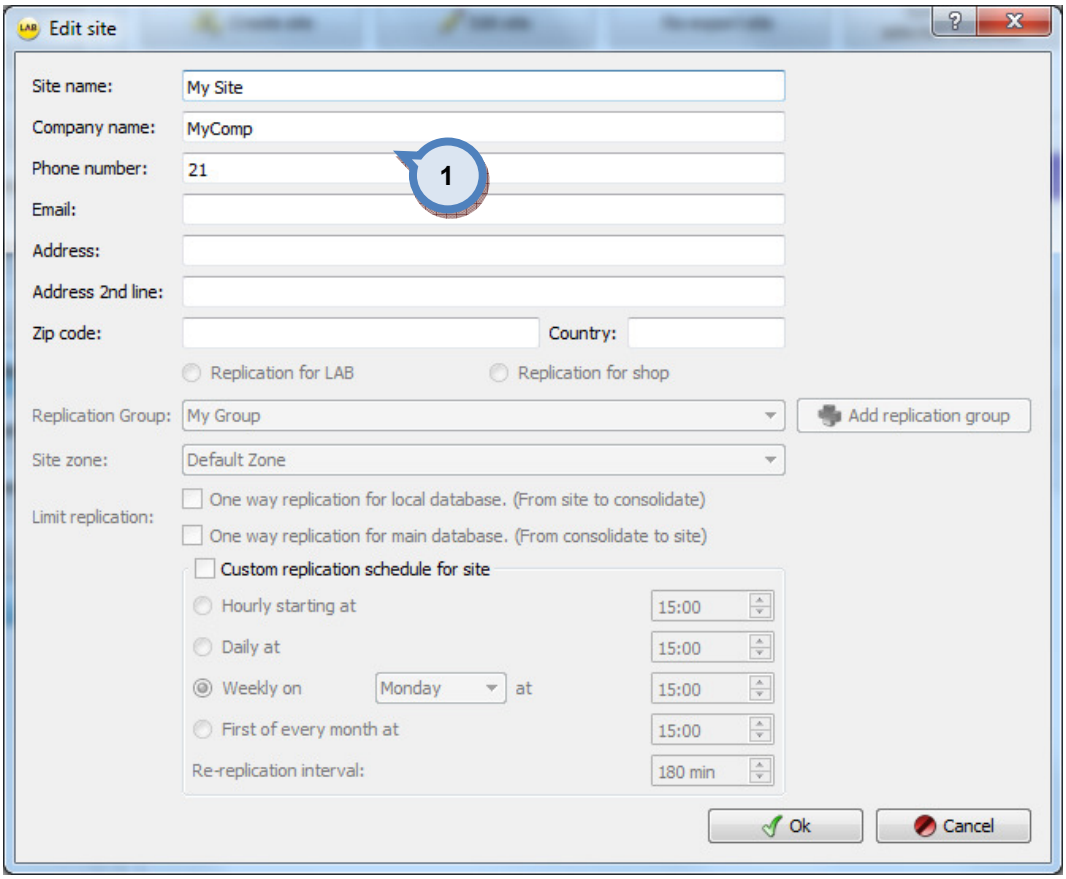
4.Add replication group: The button to add new replication group (to be selected in the table (2)

5.Custom replication schedule for site: If checkbox is enabled it is possible to set custom replication schedule that differs from regular replication schedule set on consolidate settings.

Click on the OK-button will start creation of site installation package(s)

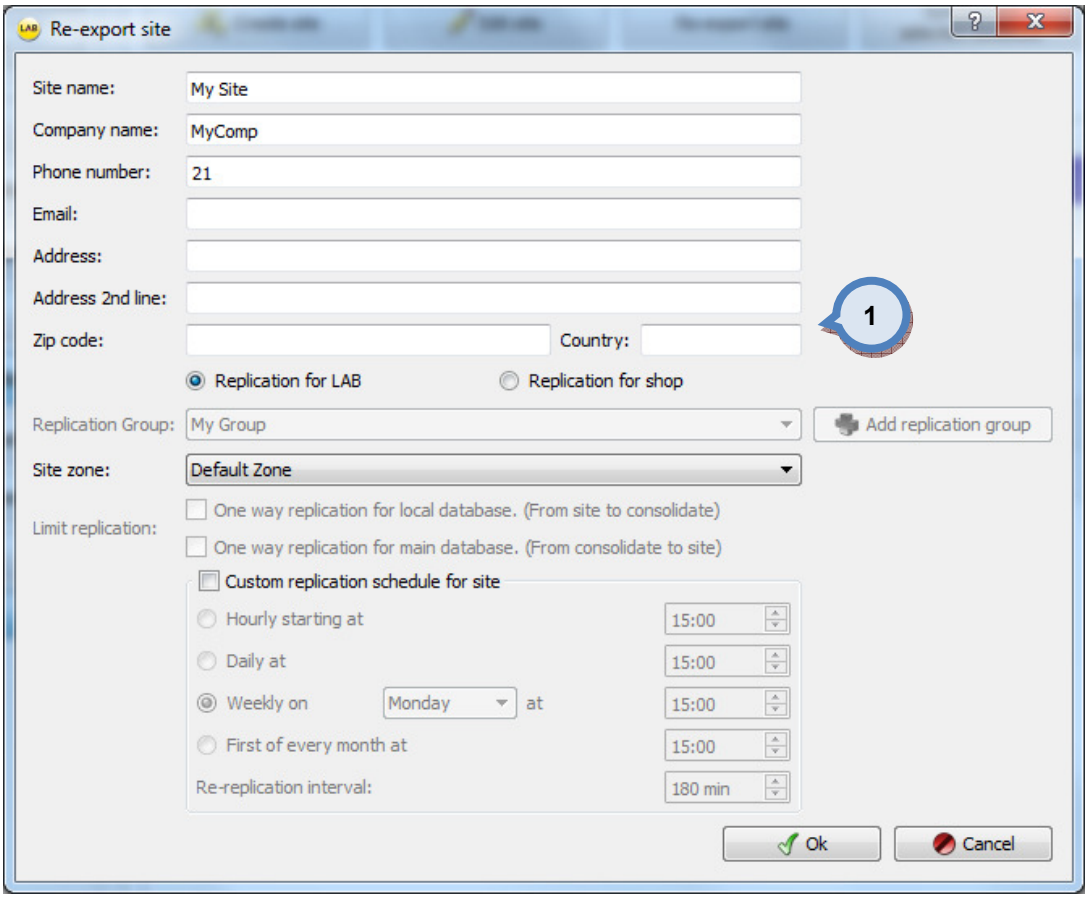


When the **Edit site** –button has been clicked, and a site has been selected, a window is opened and following options available:



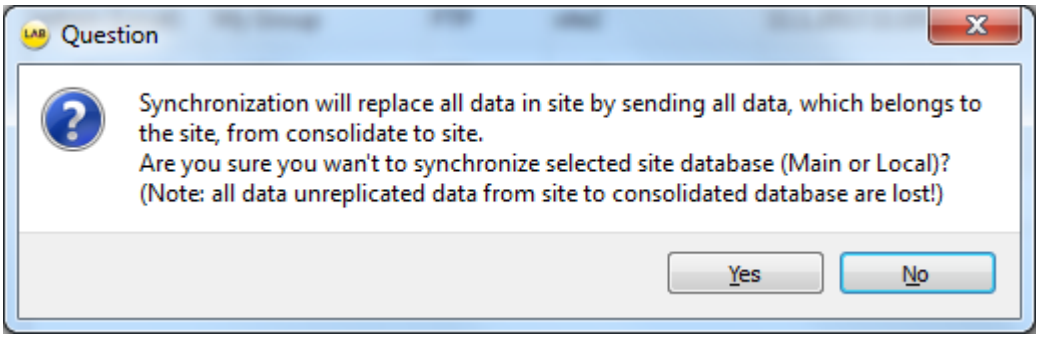
1.Possible to edit selected Site contact details.

When the **Re-export site** –button has been clicked, and a site have been selected, a window is opened and following options available:



1.All items show on screen are editable.

When the **Synchronize selected database** –button has been clicked, a window is opened:

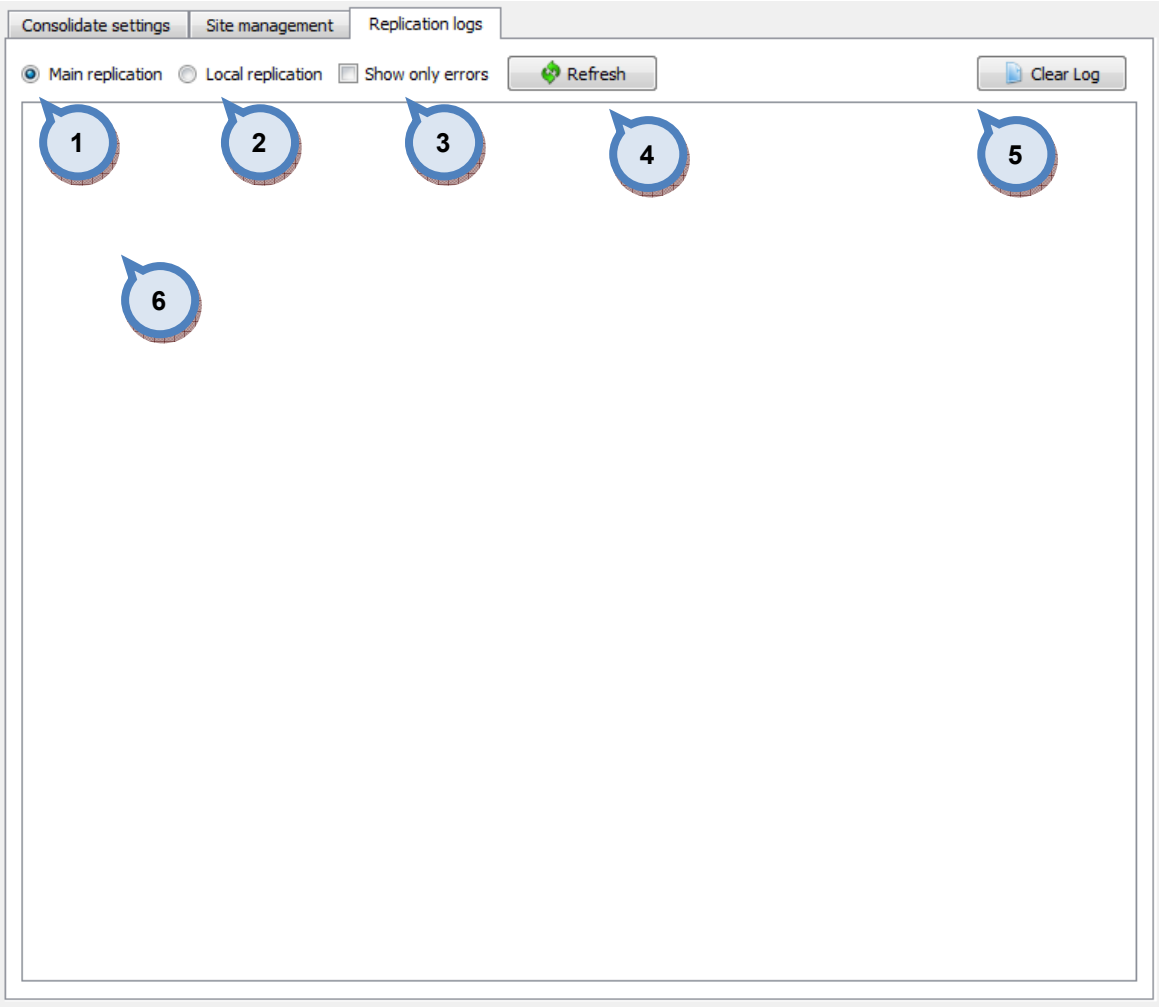


To view replication log, navigate to **Replication logs** tab page

In Replication logs tab page you can:

- View replication evens

In the **Replication log** tab page of the **Replication** page, you have the following options available:



1.Main replication: When the radio button is enabled, only main replication information is visible.

2.Local replication: When the radio button is enabled, only local replication information is visible.

3.Show only errors: When the check box is enabled, only errors are shown on the table (6).

4.Refresh: The button to update the table (6).

5.Clear log: The button to clear the table (6).

6.Table to show replication information.

7 Appendix 1: EasyPrint Manual

-

EasyPrint

(version 0.2.4)

User Manual

From:

Chromaflo Technologies
Vernissakatu 1
FIN-01300 VANTAA, FINLAND

P.O. Box 42
FIN-01301 VANTAA, FINLAND

System Support:
Tel. +358 207 188 000
Fax. + 358 207 188 020

General

© COPYRIGHT 2010, Chromaflo Technologies. - All rights reserved in all countries. No part of this material may be translated into any other languages and/or adapted and/or reproduced in any form, or by any means, electronic or mechanical, including but not limited to photocopying and recording, without prior written permission of Chromaflo Technologies.

Information in this manual is subject to change without notice and does not represent a commitment on the part of Chromaflo. Any reference to companies, names, dates and addresses used in the screens and/or examples is purely accidental, unless otherwise stated, and is intended solely to clarify use of the Chromaflo Technologies products.

Chromaflo shall not be liable for technical or editorial errors or omissions made herein; nor for incidental or consequential damages resulting from the performance or use of this material.

The names of the products used might be trademarks or registered trademarks of their respective companies.

(Reference software version EasyPrint 0.2.4)

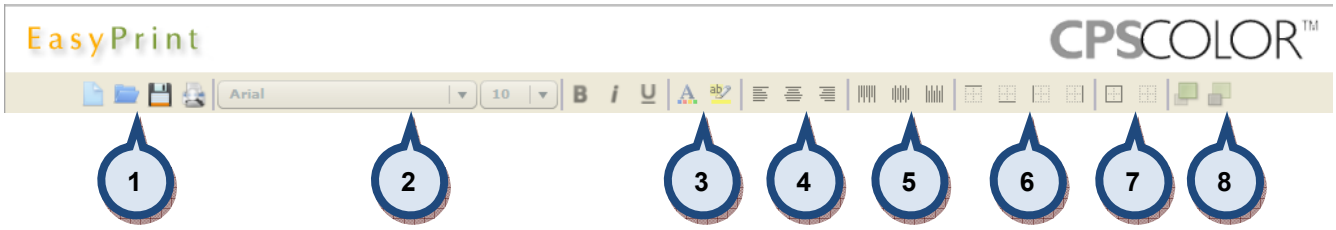
Introduction

EasyPrint software add-on replaces previous Anylabel labelling software. It is used to make and edit new labels within InnovaTint software family. Main functionalities of the software are;

- Label creation and design (any size)
- Label edits
- Retrieve order information from the database
- Place picture(s) to the label
- Create barcodes, including 2D and QR codes, and define their content

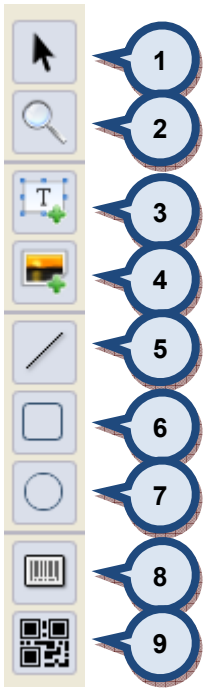
Navigation in the software

Navigation in the software is divided to three areas; main header for content design and appearance.



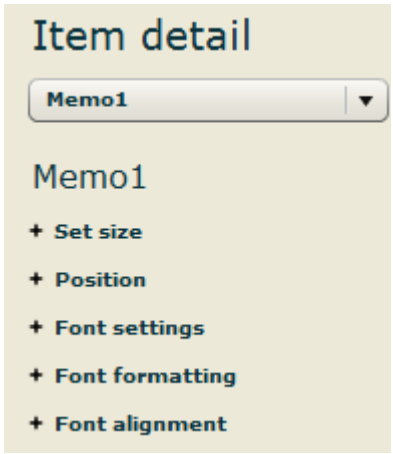
1. Label options; Create, Edit, Save and Preview
2. Font options; font type, size, bold, italic and underlined
3. Font characteristics; font color and –background color
4. Text alignment; left, middle and right
5. Text alignment; top, centre and bottom
6. Add line; top, bottom, left and right
7. Add line; surround component and clear component line properties
8. Set component order; move front and back

Left side to select item type, see **Available item types** for more details.

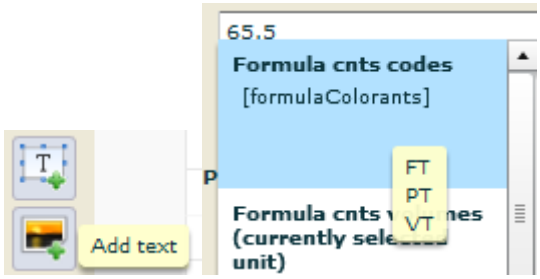


1. Select item
2. Zoom
3. Add Text-component
4. Add picture
5. Add line
6. Add rectangle
7. Add circle / eclipse
8. Add barcode
9. Add 2D barcode

And right side to define content to the item and its details.



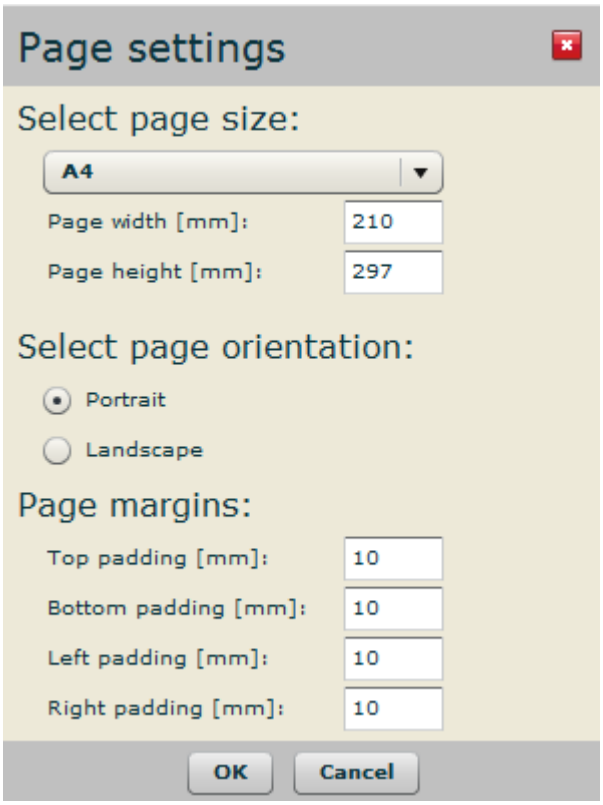
Icons on the screen come with ”tool tips” that is shown, if mouse pointer kept over the icon. The same is true also for Text system variables to display example cases of their use, **see custom text / system variable**.



Getting started

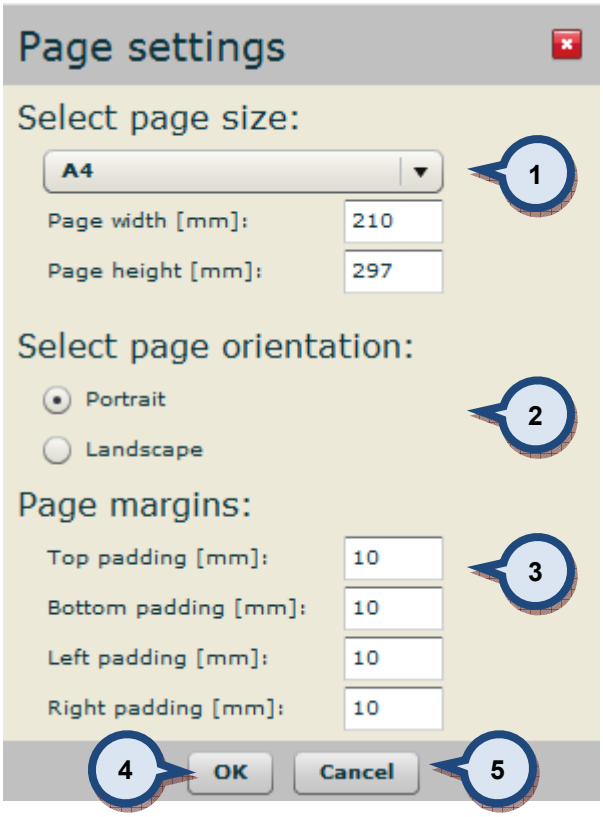
New label

A new label can be created at the program start up



or alternatively by clicking -icon on the header row or select **new** from the dropdown menu.

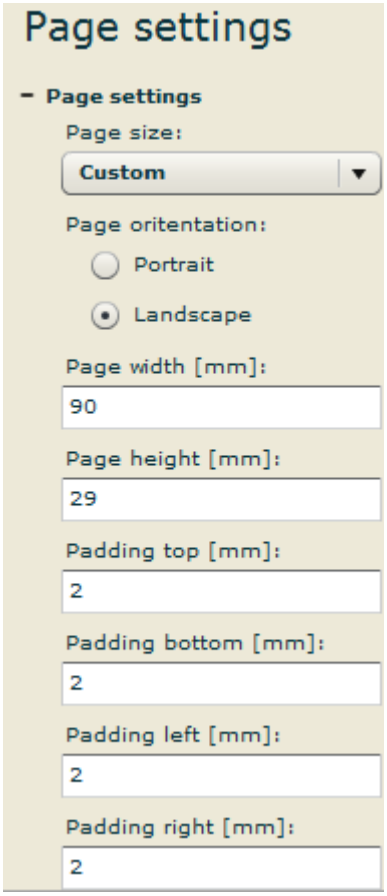
Possible settings for the label are:



1. Label size selection. EasyPrint has multiple preconfigured label sizes to choose from. It is also possible to create custom size. Width and height must be given.
2. Set the label orientation
3. Set margins
4. OK to approve new label format
5. Cancel to open EasyPrint software without preset label canvas

When a new label is created possible content items can be moved into the canvas and label can be designed into its final format. See more information on the **available item types -section.**

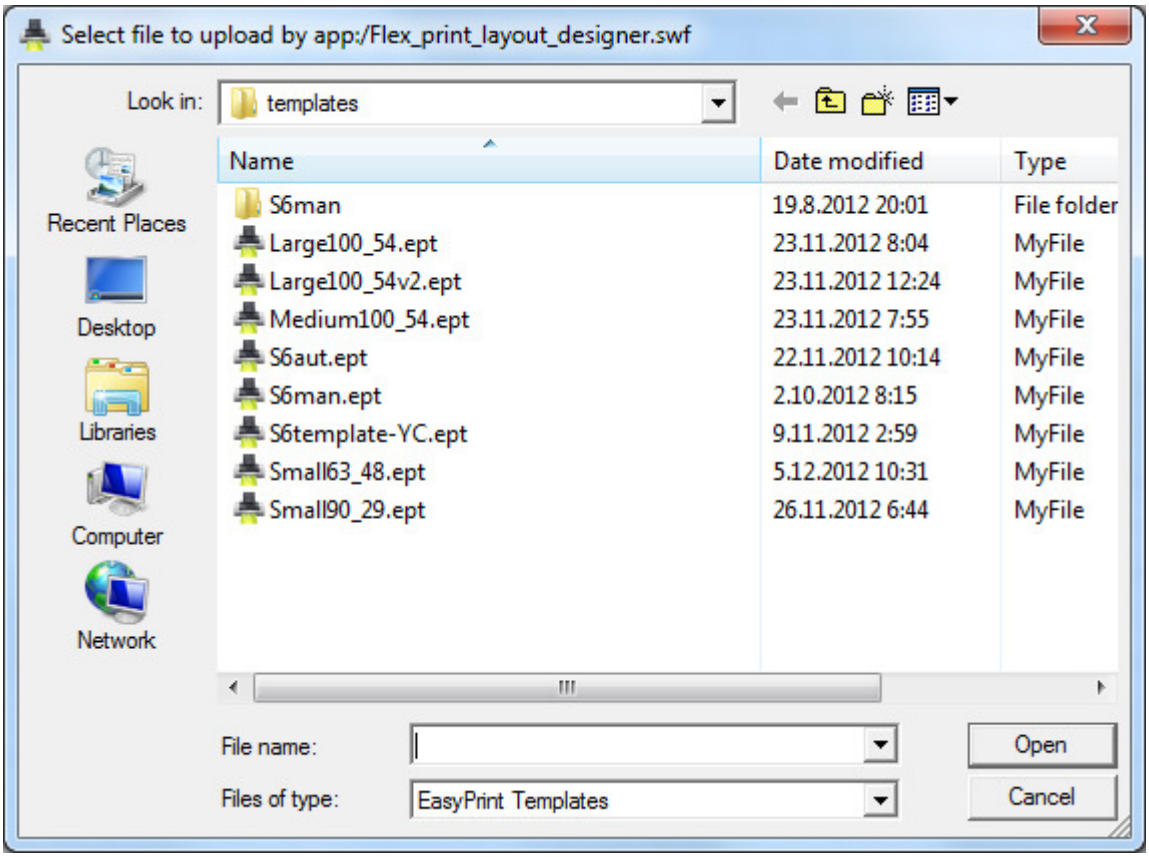
Label size and margin can always be adjusted on the right side panel under the **page settings**.



Edit label

To edit a label click on -icon or alternatively select **Open** from the dropdown menu.

A window will be displayed where to choose from available templates



*.ept files (EasyPrint templates) are by default saved under c:\wuser\easyprint\templates.

Select template and click open. Template will be opened for EasyPrint to be edited.

Save label

New or edited labels can be saved by clicking –icon or alternatively select **Save or Save as** from the dropdown menu.

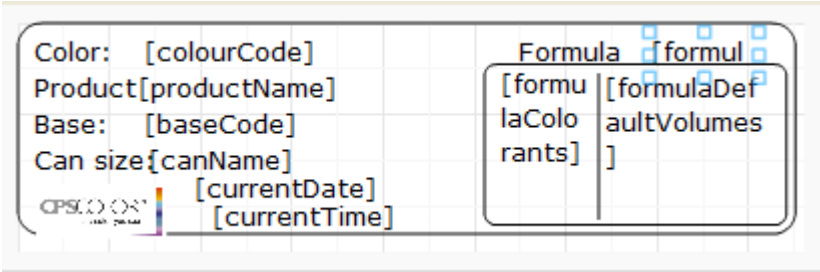
Save will overwrite previous version (if editing) and **Save as** allows to rename edited version. In both cases default location for the label is c:\wuser\easyprint\templates.

Preview label

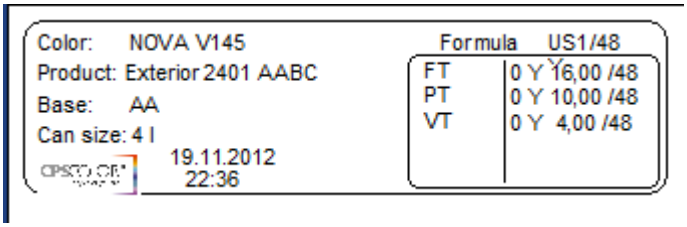
To preview label click on -icon or alternatively select **Show preview** from the dropdown menu.

A new window will be opened where data content fields are populated as they would be in real print (demonstrational data used).

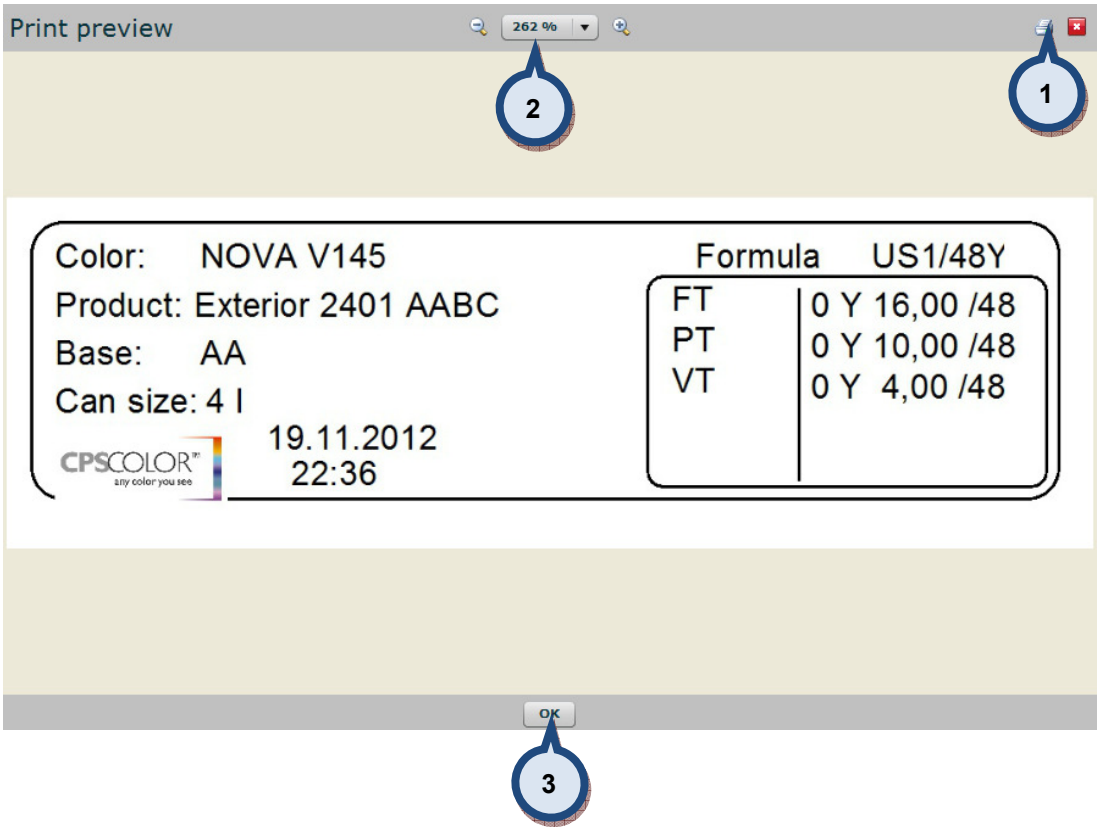
data design view:



preview mode:



Preview window has following options



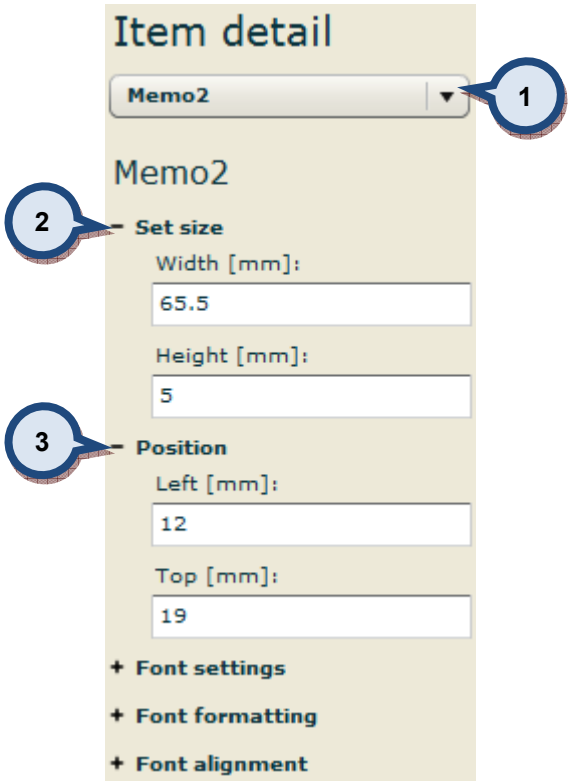
1. Print the preview
2. Zoom the object
3. Close the preview window

Available item types

Select tool

Select tool, , is used to select an item from the label in order to modify its content or to change location in the canvas. Item detail dropbox (1) or Tab-button can also be used to navigate through the items.

Depending on the selection of the item, different type of information is shown on the right side on the **Item details** section.



2. Set size defines the size of the component
3. Position the location of the item in the label (top left corner)

   both of these are always present to each item types

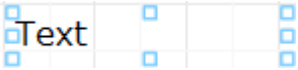
All item, when selected, can be moved around the canvas with mouse by clicking it and dragging it to its new location. Likewise it's possible to reset their size by extending/shrinking the area of the component. Any change made are effected to above size and position values.

Zoom

Zoom tool, , is used to zoom in and out. Mouse left click zooms in and right click out.

Add text

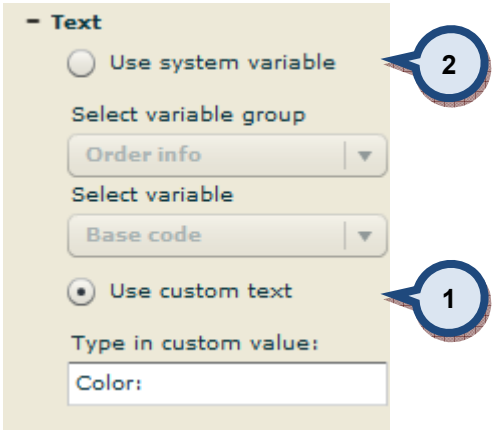
Text component is added to the label by clicking -icon and placing it to the canvas.

Area within the blue rectangles is reserved to display the content. 

Custom text / system variable

Text can be “custom text” or a system variable – component to collect data from the database.

Use radio -button to select the type of content.



1. To create static text to the label select custom text. Type in custom value.
2. To collect data from the database select system variable.

System variables are grouped into logical sets that present the area of need to easier find needed data variable. Possible options for group are:

- Date and times
- Extra info
- Formula
- InnovaTint Lab
- Order info
- Prices (default currency)
- Prices (selected currency)
- Site info

Date and times

Variable from Data and times displays Date and/or time in its short format as set in Windows regional settings. Possible options are;

- Current date [currentDate] “19.12.2012”
- Current date + time [currentDateTime] “19.12.2012 12:12”
- Current time [currentTime] “12:12”

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Extra info

Variable from Extra info displays additional information related to the order. Price group info can only be shown, if in InnovaTint Lab mentioned function has been set to use. Possible options are;

- Price group [EIPriceGroup] “2”
- Total mass [EITotalMass] “1234,34 g”
- Total volume [EITotalVolume] “1000,23 ml”

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Formula

Variable for the Formula displayes information related to the formula used in the order. Possible options are:

- Formula cnts codes [formulacolorants] “RT, TT, VT” –*where each colorant is on it’s own row*
- Formula cnts volumes (currently selected unit) [FormulaSelectedVolumes] “12/96, 41/96, 15/96” –*where each amount is on it’s own row. /96 in this example presents temporarily selected unit in use.*
- Formula cnts volumes (default unit) [FormulaDefaultVolumes] “12/96, 41/96, 15/96” –*where each amount is on it’s own row. /96 is the default unit set in InnovaTint POS version.*
- Formula cnts volumes (ml) [FormulaMlVolumes] “0,12, 0,13, 0,14” –*where each amount is in ml’s and on it’s own row*Formula note [FormulaNote] “low hiding”
- Formula volumes unit (currently selected) [formulaSelectedUnit] “/96”
- Formula volumes unit (default) [formulaDefaultUnit] “/192”
- Formula volumes unit (ml) [formulaMlUnit] “ml”
- Formula weighting (volumes from db) [formulaCCsFromDb] “1, 2, 3” –*where each amount is on it’s own row*
- Formula weighting (volumes from scale) [formulaCCsFromScale] “1, 2, 3” –*where each amount is on it’s own row*
- Formula weighting (weights from db) [formulaWeightsFromDb] “1, 2, 3” –*where each amount is on it’s own row*

- Formula weighting (weights from scale) [formulaWeightsFromScale] "1, 2, 3" –*where each amount is on it's own row*

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

InnovaTint Lab

InnovaTint Lab variables are designed to support InnovaTint Lab matching and charaterization features. Possible options are:

- Characterization set component [charsetCMP]
- Characterization set components [charsetSampleComponents]
- Characterization set formula volumes (proposed amount of component) [charsetCMPpro]
- Characterization set formula volumes (true specific gravity for sample) [charsetCMPsg]
- Characterization set name [chasetName]
- Characterization set sample name [charsetSampleName]
- Characterization set volumes (actual amount of component) [charsetCMPam]
- Color HTML [colorHTML]
- Color LAB [colorLAB]
- Color XYZ [colorXYZ]
- Sample made by [madeBy]
- Sample thickness [thickness]
- VOC components [formulaVOCcontent]
- VOC total [formulaVOC]

Order info

Order info variables are related items in the order and customer. Possible options are:

- Base code [baseCode] “White”
- Can actual / total [canIDLot] “2/4”
- Can actual number [canID] “3”
- Can name [canName] “4 litre”
- Cans total number [canTotal] “10”
- Colour code [colourCode] “Spirit 1-2-3”
- Colour name [colourName] “Blue velvet”
- Customer name [customerName] “John Doe”
- Date of Order [modificationDate] “18.12.2012 14:20”
- Date of order creation [creationDate] “17.12.2012 12:12”
- Order ID [orderID] “100202”
- Product name [productName] “Exterior Latex”
- User notes [UserNote] “Living room ceiling”

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Prices (default currency)

Default currency prices variables uses currency and values set for the zone in use. See LAB manual for the calculation models. Possible options are:

- Base cost (default) [EIPDBaseCost] "20 €"
- Base margin (default) [EIPDBaseMargin] "5 €"
- Base price (default) [EIPDBasePrice] "25 €"
- Colorant cost (default) [EIPDCntCost] "1 €"
- Colorant margin (default) [EIPDCntMargin] "0,1 €"
- Colorant price (default) [EIPDCntPrice] "1,1 €"
- Cost (default) [EIPDCost] "21 €"
- Discount (default) [EIPDDiscount] "0"
- List price (default) [EIPDListPrice] "26,1 €"
- Margin (default) [EIPDMargin] "5,1 €"
- Maximum retail price (default) [EIPDMaxPrice]
- Price (default) [EIPDPrice] "26,1 €"
- Price per kg (default) [EIPDPricePerKilogram] "26,1 €"
- Price per litre (defaul) [EIPDPricePerLitre] "28,0 €"
- Tax (default) [EIPDTax] "2 €"
- Tint fee (default) [EIPDTintFee] "0,3 €"
- Tint price (default) [EIPDTintPrice] "1,4 €"

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Prices (selected currency)

Selected currency prices variables uses alternative currency and its conversion rate as set in POS. Shown values are conversions and may cause inaccuracies. Possible options are:

- Base cost (selected) [EIPSBaseCost] "20 €"
- Base margin (selected) [EIPSBaseMargin] "5 €"
- Base price (selected) [EIPSBasePrice] "25 €"
- Colorant cost (selected) [EIPSCntCost] "1 €"
- Colorant margin (selected) [EIPSCntMargin] "0,1 €"
- Colorant price (selected) [EIPSCntPrice] "1,1 €"
- Cost (selected) [EIPSCost] "21 €"
- Discount (selected) [EIPSDiscount] "0"
- List price (selected) [EIPSListPrice] "26,1 €"
- Margin (selected) [EIPSMargin] "5,1 €"
- Maximum retail price (selected) [EIPSMaxPrice]
- Price (selected) [EIPSPrice] "26,1 €"
- Price per kg (selected) [EIPSPricePerKilogram] "26,1 €"
- Price per litre (selected) [EIPSPricePerLitre] "28,0 €"
- Tax (selected) [EIPSTax] "2 €"
- Tint fee (selected) [EIPSTintFee] "0,3 €"
- Tint price (selected) [EIPSTintPrice] "1,4 €"

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Site info

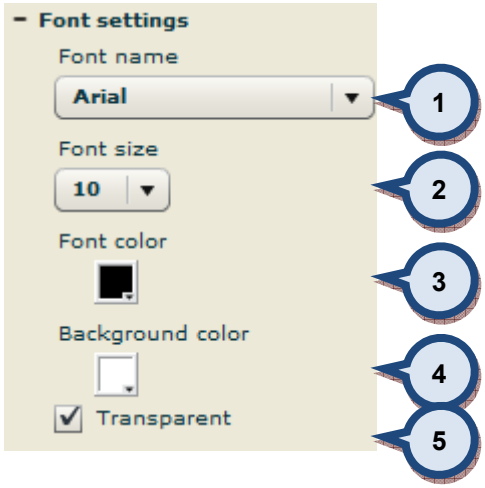
Site info variable displayes infromation about the store. Possible options are:

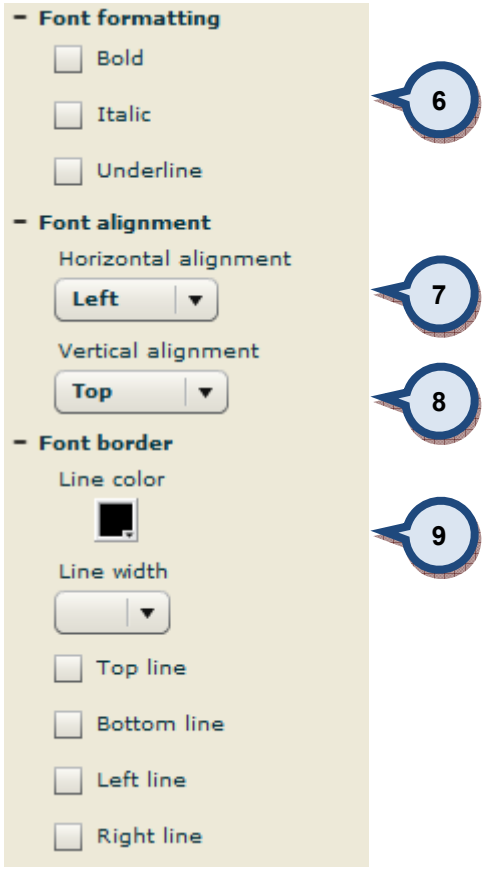
- Company name [companyName] "Retailer ABC"
- Site address 1 [address1] "Paint street 1"
- Site address 2 [address2] "City2"
- Site country [country] "Finland"
- Site email [email] retailer1@abc.com
- Site name [siteName] "local site"
- Site phone [phone] "+358 123 123"
- Site post code [postCode] "12312"

,where info on brackets is the name of function as displayed on the designer canvas. Values on quotation marks are examples of the outcome.

Text formatting

Text format, font type, size, color…, can be set in header line settings (**see section 2**) or using item details options.



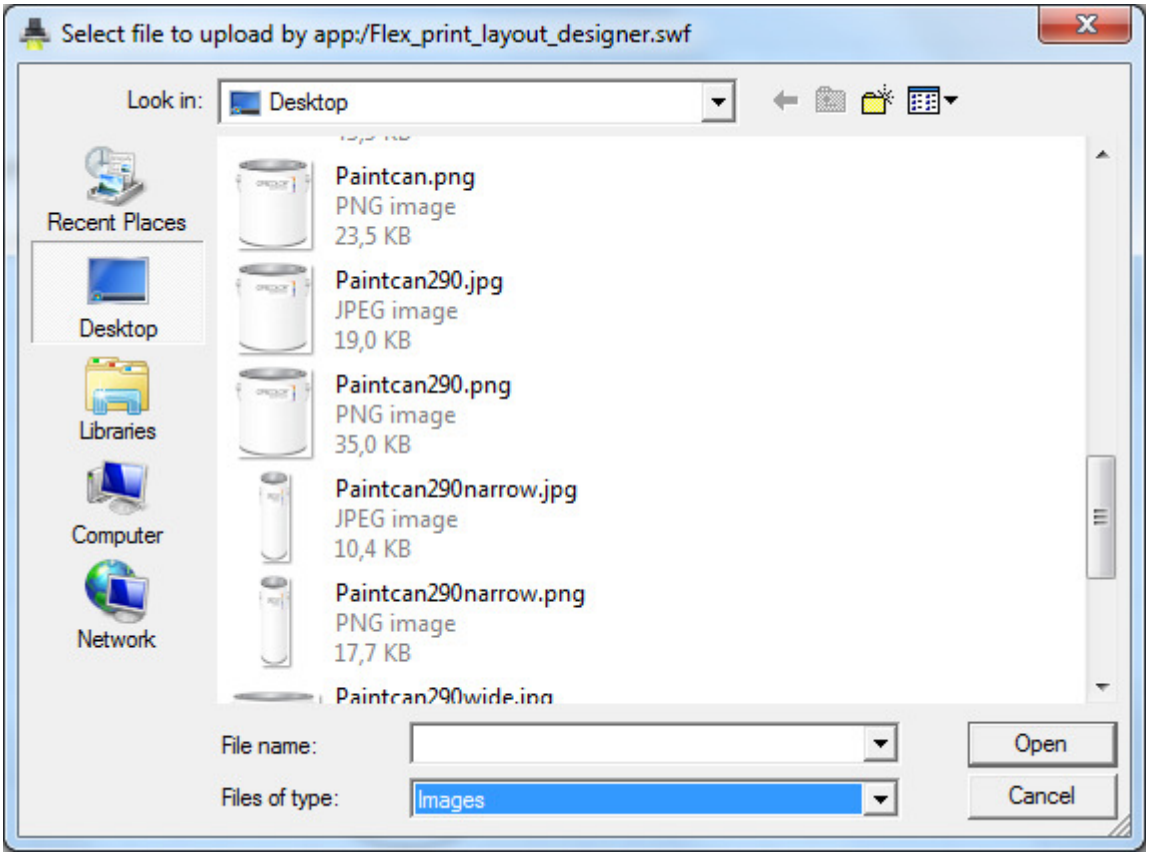


1. Set the font
2. Set the font size
3. Font color
4. Background color for the text
5. Should the background be transparent
6. Font format

7. Horizontal alignment, left, centre, right
8. Vertical alignment, top. middle, bottom
9. Border options, line color. width and orientations.

Add picture

Click on the -icon to add picture to the canvas. A new window will be opened to define location where to find needed picture.



Supported picture formats are .jpg, .bmp and .png.

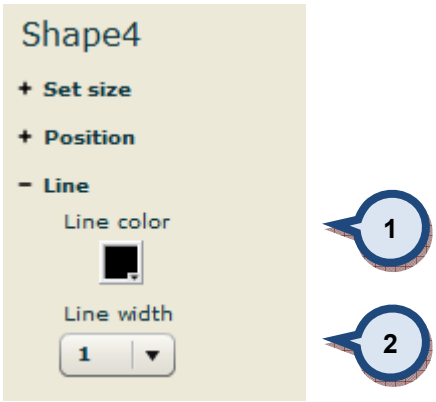
Place the picture to its location.

Following options are available to control picture items

1. Location for the picture
2. How to treat picture if the area reserved for it doesn't match the picture aspect ratio. If off, picture is scaled to fit whole area.

Add line

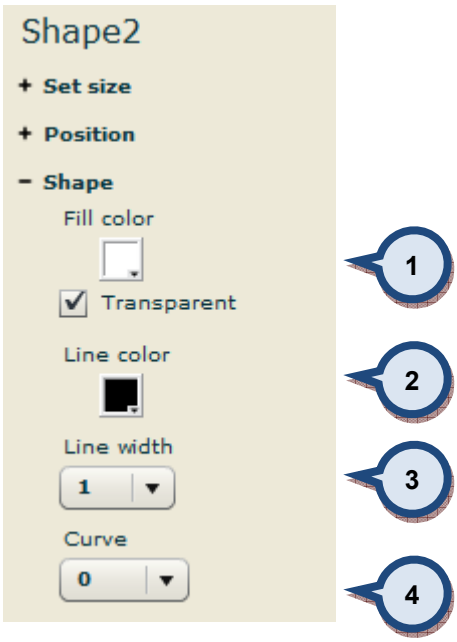
Click on the -icon to add a line to the canvas. Following options are available to control line properties.



1. Set line color
2. Set line width

Add rectangle

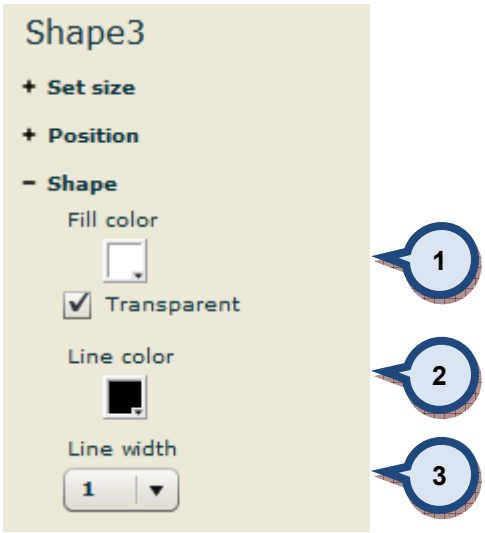
Click on the –icon to add a rectangle to the canvas. Following options are available to control rectangle properties.



1. Set fill color and transparent
2. Set line color
3. Set line width
4. Set radius for the corners.

Add circle / eclipse

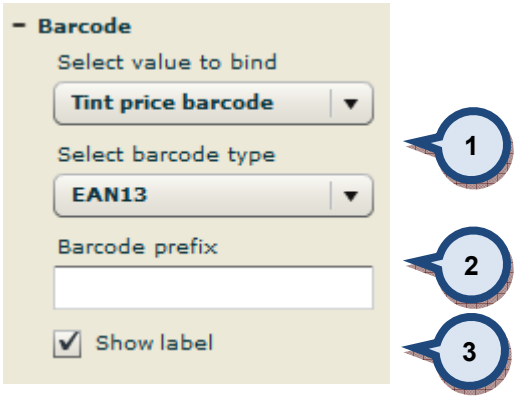
Click on the –icon to add a circle or eclipse to the canvas. Following options are available to control circle properties.



1. Set fill color and transparent
2. Set line color
3. Set line width

Add barcode

Click on the –icon to add barcode to the canvas. Following options are available to control circle properties.



1. Type of information to be set into the barcode. Options are:
    - Base cost barcode (type EAN13/UPC)
    - Base margin barcode (type EAN13/UPC)
    - Base price barcode (type EAN13/UPC)
    - Color barcode (type Code39)
    - Colorant cost barcode (type EAN13/UPC)
    - Colorant margin barcode (type EAN13/UPC)
    - Colorant price barcode (type EAN13/UPC)
    - Cost barcode (type EAN13/UPC)
    - Discount barcode (type EAN13/UPC)
    - List price barcode (type EAN13/UPC)
    - Margin barcode (type EAN13/UPC)
    - Maximum retail price (type EAN13/UPC)
    - Order barcode (type Code39)
    - Price barcode (type EAN13/UPC)
    - Price group barcode (type EAN13/UPC)
    - Price per kg barcode (type EAN13/UPC)
    - Price per litre barcode (type EAN13/UPC)
    - Tax barcode (type EAN13/UPC)
    - Tint fee barcode (type EAN13/UPC)
    - Tint price barcode (type EAN13/UPC)

2. Barcode prefix gives an option to pinpoint barcode type to one used in cashier system.

   EAN/UPC barcode consist four distinct areas

   - prefix (links the item to cashier system) “2303222”
   - “zero” padding (fills the empty space of the others) “000”
   - encoded price (price coming from the database) “89”
   - checksum “5”

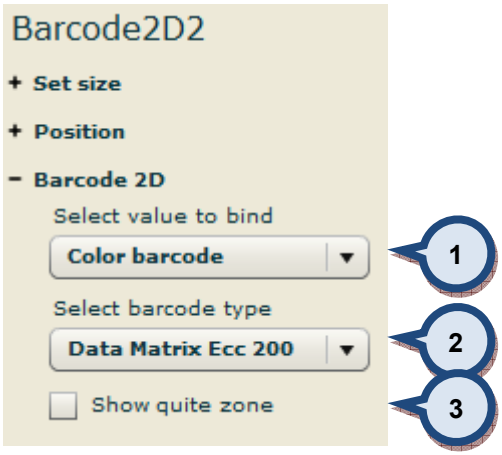
   2 303222 00089 5

   If prefix is started with zero “0”, created barcode is compatible with UPC-based coding.

3. Show label adds barcode label into the barcode, see below picture.

Add 2D barcode

Click on the –icon to add barcode to the canvas. Following options are available to control circle properties.



1. Type of information to be set into the barcode. Options are:
   - Color barcode
   - Order identificator
2. Type of 2D barcode, options are:
   - Data Matrix Ecc 200
   - QR Code

QR Data Matrix

3. Show quite zone add empty margins around the barcode.