

X-Rite InkFormulation 6

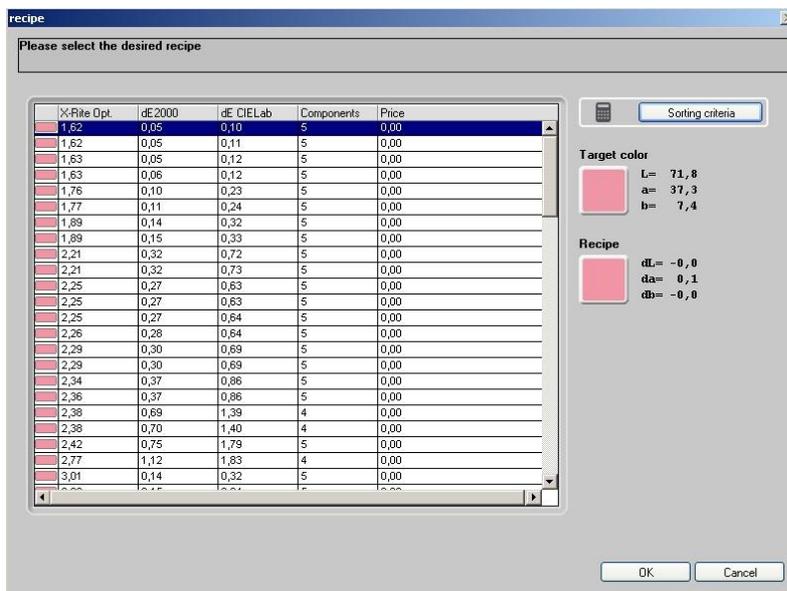
Application Notes: Sorting Editor

General

InkFormulation 6 offers the user the opportunity to sort recipes according to 6 pre-defined criteria. Below you will find instructions on how to use this helpful feature.

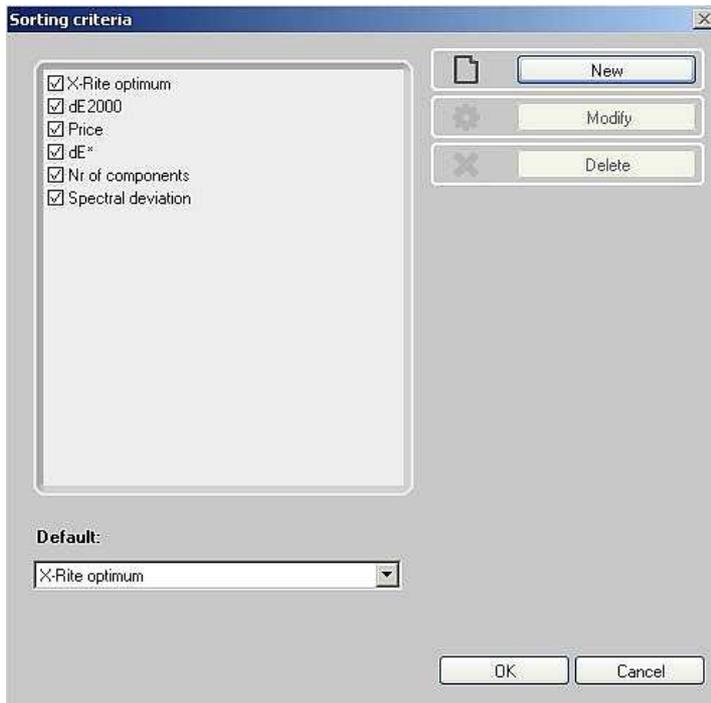
Sorting Recipes

In the “Recipe Selection” window you get a list with recipes sorted according to the desired sorting criterion. The user can choose from 6 pre-defined sorting criteria. Recipes will be automatically reordered, with the lowest value first, indicating the best recipe pertaining to this criterion.



To deactivate a criterion, click on “**sorting criteria**”. Please disable one criterion and click “OK”. The deactivated criterion will no longer be displayed.

Using the menu “Settings”: “Workflows” you also get via the button  to the sorting criteria.



The user can also create new sorting criteria pertinent to their needs. Click on “New” to open the “Sorting Editor”.

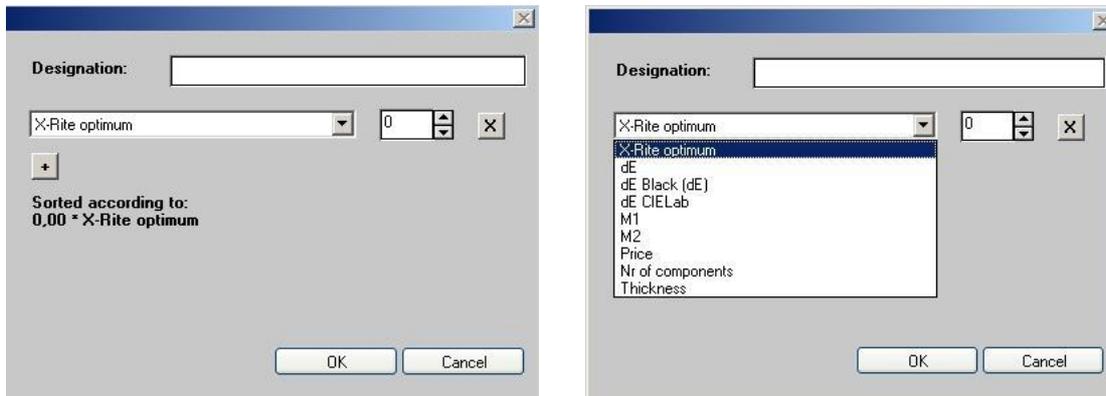
In the Sorting Editor window you can define a new criterion from a selection formed by weighting factors.

Available criteria:

- X-Rite Optimum
- dE (current selected dE)
- dE CIEL*a*b*
- M1
- M2
- Number of components
- Ink film thickness
- Price
- Lightness
- Saturation

Formula: factor x * criterion 1 + factor y * criterion 2 +...

The weighting factor can be chosen within any number range. But you have to pay attention to the relation between different factors. The higher the number of factors, the greater the total amount. The best value is the lowest.



The following examples give you an understanding of the weighting factors:

- 1) If you set the factor of one criterion to #1, this corresponds to the selected default criteria.

Please set the factor of X-Rite Optimum 1.0 and close the Sorting Editor by clicking OK.

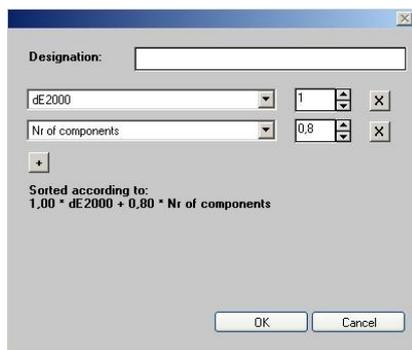
The new sorting formula: 1* X-Rite Optimum

Recipe	X-Rite Optimum	Sorting Weight
1	1.5	1.5

- 2) You accept a higher dE2000 of 0.8 if you economize one ink component.
Please set the following weighting factors (wf):

$$wf (dE2000) = 1$$

$$wf (\text{No. of components}) = 0.8$$



The new sorting formula: $1 * dE2000 + 0.8 * \text{No. of components}$

Recipe	dE2000	No. Components	Sorting Weight
1	1.5	4	4.7
2	2.1	3	4.5
3	1.9	3	4.3

Recipe 1 has a minimal color deviation, but 4 components are in use.

Recipe 2 has a higher dE2000 deviation but uses only with three components.

Recipe 3 is very good. The color deviation is acceptable and only three ink components are being used.

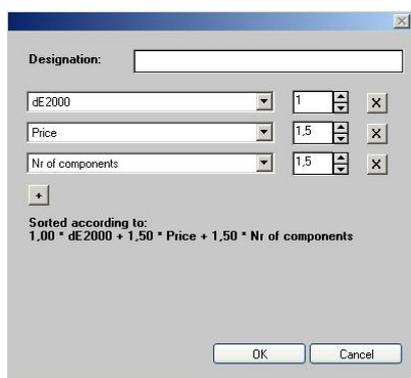
- 3) You accept a higher dE2000 of 1.5 if you economize one ink component and if you minimize the price.

Please set the following weighting factors (wf):

wf (dE2000) = 1

wf (Price) = 1.5

wf (No. of components) = 1.5



The new sorting formula: $1 * dE2000 + 1.5 * price + 1.5 * No. \text{ of components}$

Recipe	dE2000	Price	No. Components	Sorting Weight
1	3	1	5	9
2	2	2	4	11
3	1.5	1.50	5	11.25

Recipe 1 is low priced but has a visible color deviation.

Recipe 2 is higher priced, but uses fewer components and has an acceptable color deviation.

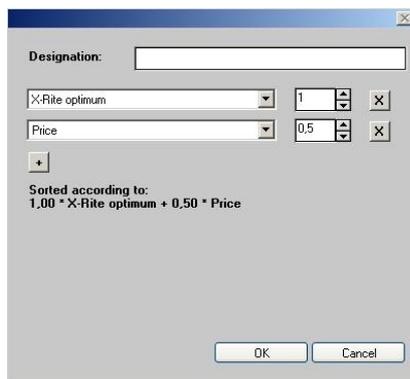
Recipe 3 has the best quality but without any economies.

- 4) You are satisfied with the X-Rite Optimum but you would like to put more weight on the price.

Please set the following weighting factors (wf):

wf (X-Rite Optimum) = 1

wf (Price) = 0.5



The new sorting formula: $1 * \text{X-Rite Optimum} + 0.5 * \text{price}$

Recipe	X-Rite Opt.	Price	Sorting Weight
1	1.8	2	2.8
2	2.5	2.50	3.75
3	2.2	1.80	3.1

Recipe 1: The value for X-Rite optimum is very good, but the recipe is expensive.

Recipe 2 is critical. The value for our sorting formula is the highest one because of the price and the optimum.

Recipe 3 is okay.