ProductionWizard™

Fix-a-Mix™: Setting Up a Formula for Re-standardization

Re-standardizing a formula means that the formula is out of spec, for instance, the fat is too low or the total solids are too high. We need to ascertain what can be added to the formula to make it right again. One of the things that should be considered when re-standardizing a formula is convenience. If the re-standardized formula is going to be mostly original formula with a small amount of other ingredients added to it, one may want to limit the ingredients used during re-standardization. This document contains two sections *Setting Up a Formula for Re-standardization* and *Setting Up a Pre-Mix Formula for Re-standardization*. This first section covers the most typical situation.

Setting Up a Formula for Re-standardization

Instructions:

FORMULA DEV SECTION
1. Retrieve the formula to re-standardize.
2. Make the formula an ingredient. When the window appears to enter the ingredient name, put a space in front of the ingredient name if you would like it to sort to the top of the list of ingredients.

INGREDIENT FILE
3. Edit the ingredient file.
4. Change the price of the ingredient to 0.001 to insure that as much as possible is used. Modify the ingredient reference number as needed.
5. If the property, rework is not in the ingredient file; add it. Set the amount of rework for the ingredient to 100%.
6. Modify the ingredient configuration to allow the amount of total solids and total fat to be updated in the Batch Creation Tool (Method for entering ingredient composition using batch tool = 4).
7. Except for the formula ingredient, the composition of all remaining ingredients must be determined by constraints set on properties. If necessary, add new properties to the ingredient file, enter amounts in the ingredient file. You may need to review the formula and edit the ingredient file again.
8. Save the ingredient file and close.

FORMULA DEV SECTION
9. Add the formula ingredient back to the original formula.
10. Sort it to be the first ingredient.
11. Set the ingredient min to 85%. This is done to insure that a reasonable amount of the original formula is used or the formulation will fail.
12. Change the formula name by adding FIX IT to the end. This will insure you don't overwrite the original formula.
13. Remove ingredients that are used in amounts of 1% or less.
14. You may wish to add concentrated forms of ingredients that supply solids and fat. For instance, skim milk powder, butter oil, granulated sugar, etc. This allows the program to fix the formula while using no more than 15% of ingredients other than the original formula.
15. Except for the formula ingredient, the composition of all remaining ingredients must be determined by constraints set on properties. If necessary, add properties to the formula, and set constraints.
16. Add the property, rework to the formula.

FORMULA CONFIGURATION TOOL
17. Start **Formula Configuration Tool** and press the **Next** button.
18. In step 2, select the option **Edit Current Formula Loaded in Production Wizard** and press the **Next** button until you reach step 4.
19. Set **Batch Size Based On** to **rework**.
20. Enter an amount for **Default Batch Size** and **units** as needed. Click the **Next** button until you reach step 7.
21. Select **Yes** to save changes then press the **Next** button.
22. Press the **Finish** button. The formula is ready to test with the Batch Creation Tool

Setting Up a Pre-Mix Formula for Re-standardization

Re-standardizing a pre-mix formula can be difficult since other ingredients are added after the pre-mix is re-standardized.

Instructions:
FORMULA DEV SECTION
1. Retrieve the formula to re-standardize.
2. Zero out everything except the pre-mix. In our example everything from chase water down.
3. Normalize the formula.
4. Make the formula an ingredient. When the window appears to enter the ingredient name, put a space in front of the ingredient name if you would like it to sort to the top of the list of ingredients and add "Pre-Mix" to the name.

INGREDIENT FILE
5. Edit the ingredient file.
6. Change the price of the ingredient to 0.001 to insure that as much as possible is used. Modify the ingredient reference number as needed.
7. If the property, rework is not in the ingredient file; add it. Set the amount of rework for the ingredient to 100%.
8. Modify the ingredient configuration to allow the amount of total solids and total fat to be updated in the Batch Creation Tool (Method for entering ingredient composition using batch tool = 4).
9. Except for the formula ingredient, the composition of all remaining ingredients must be determined by constraints set on properties. If necessary, add new properties to the ingredient file, enter amounts in the ingredient file. You may need to review the formula and edit the ingredient file again.
10. Save the ingredient file and close.

FORMULA DEV SECTION
11. Add the formula ingredient back to the original formula.
12. Sort it to be the first ingredient.
13. Set the ingredient min to 90%. This is done to insure that a reasonable amount of the original formula is used or the formulation will fail.
14. Change the formula name by adding FIX IT to the end. This will insure you don't overwrite the original formula.
15. You may wish to add concentrated forms of ingredients that supply solids and fat. For instance, skim milk powder, butter oil, granulated sugar, etc. This allows the program to fix the formula while using no more than 10% of ingredients other than the original formula.
16. Add the property, rework to the formula.

FORMULA CONFIGURATION TOOL
17. Start **Formula Configuration Tool** and press the **Next** button.
18. In step 2, select the option **Edit Current Formula Loaded in Production Wizard** and press the **Next** button until you reach step 4.
19. Set **Batch Size Based On** to **rework**.
20. Enter an amount for **Default Batch Size** and **units** as needed. If a value for flush water is provided, reduce it by 10% by weight. Click the **Next** button until you reach step 7.
21. Select **Yes** to save changes then press the **Next** button.
22. Press the **Finish** button. The formula is ready to test with the Batch Creation Tool