

Formulation Results in form-U-net Are Incorrect

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When running a formulation, the results are incorrect.

This may happen if the settings in *Material Group / Edit Selected Material Group* have been incorrectly edited. Follow the steps below to verify the settings.

Edit Data

1. Verify the *Product* row has no values in any cell except in the *Wt* column, and it should have a -1.
2. Check the *Wt* column to see that every row has a 1 in it except for the *Product* row.
3. Check the analysis of every item in the group for accuracy.
4. Check the *DEN* column for accurate densities (cu. ft. or gallons per ton).

Edit Activities

1. Check the *Code* column for duplicates or omissions. The *Product* row should be at the bottom with a *Code* of *PRODUCT*.
2. The *Cost* and *Price* of the *Product* row should be \$0.0000.
3. Verify all *Lower Bounds* are set to 0.
4. Verify all *Upper Bounds* are set to *Inf*.
5. Check the *Input Scale* column. This is the number of pounds per unit in the *Units* column. A *Unit of Pound* is 1, *Ton* is 2,000, etc.
6. Look for illogical *Item Types* in the *Type* column.
7. The *Mix* option should be selected on all rows. Unselecting this box still allows the item to be used in blends, but it will not appear on the screen or when printed as being used in the mix.

Edit Restrictions

1. Check to see that all the restrictions have the correct *Code*.
2. The *Cost* and *Price* columns should be \$0.0000.
3. The *Lower Bound* should be *-Inf* on all rows except the *Weight balance*, which is 0.0000. Setting both the *Lower* and *Upper Bounds* to *Inf* will generate errors.
4. The *Upper Bound* should be *Inf* on all rows except the *Weight balance*, which is 0.0000.
5. The *Input Scale* default settings:
 1. Nutrient restrictions should be 100 with a *Unit of Pound*.
 2. Heavy Metals set to *PPM* will be 1,000,000 with a *Unit of Pound*.
 3. *CuFt* or *Gal/Ton* will be 2000.00 with a *Unit of Pound*.

4. Verify there are no duplicate *Types* that also have the same *Mix* option setting. For example, chelated Zinc will use the *Zn Type* with *Mix* unselected.

Edit Information

1. Verify the *Material System* matches the *Item Types* used in the group.
2. The *Product Unit of Measure* is usually set to *Ton*.
3. The *Mixer Unit* is usually set to *Pound*, though sometimes to *Gallons* in Fluid groups.
4. Check the *Volumetric Mixing* setting. This changes the *Maximum Batch Size* from weight units, *Pounds*, to units of volume, *Cubic Feet* or *Gallons*, depending on the *Material System* selected.