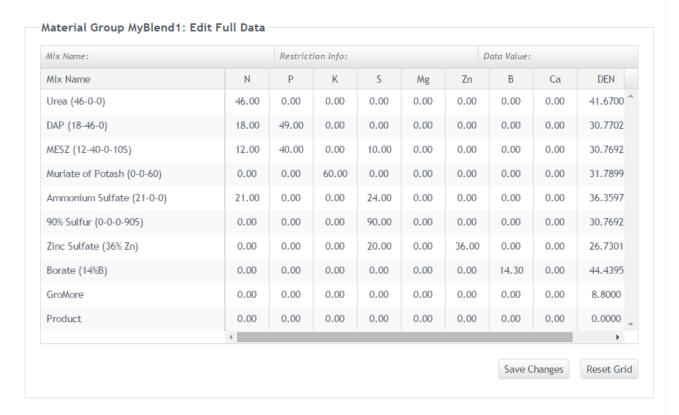
## Custom Restrictions in form-U-net

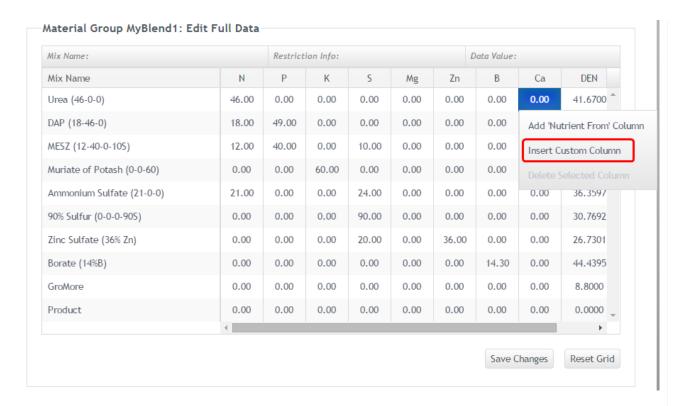
Last Modified on 01/19/2022 3:43 pm CST

Example: An additive needs to be added as a percentage of the finished blend (such as 2 Qts per ton of the blend) or as a quantity per a given quantity of a product (such as 2 Qts per ton of Urea).

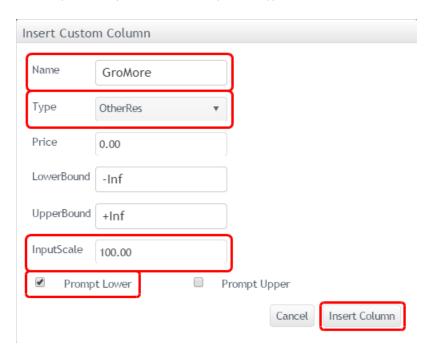
The Insert Custom Column feature in form-U-net can be used to add the additive as a percentage of the finished blend. This is found at Material Groups / Edit Selected Material Group / Edit Data. For this example, a product called GroMore will be used which has been added to the MyBlend1 Material Group. GroMore is used at 2 Qts per ton of the finished blend.



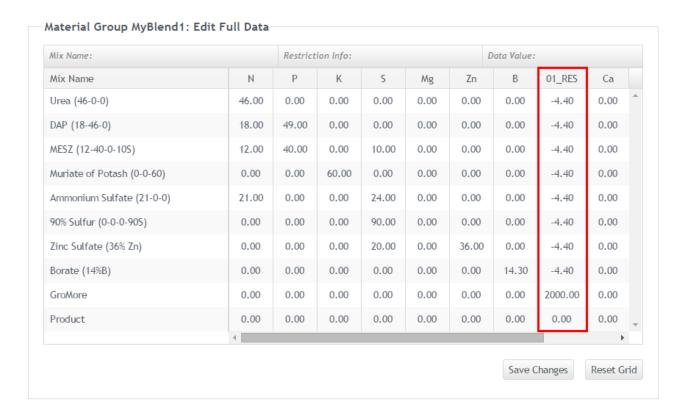
To insert the custom column, select a cell to the right of where the new column needs to be inserted. Right-click in the cell, and select *Insert Custom Column*.



The *Insert Custom Column* window opens. Enter the *Name* for the new column, set the *InputScale* to 100, and select the *Prompt Lower* option. In this example, the *Type* is set to *OtherRes*. Then select the **Insert Column** button.

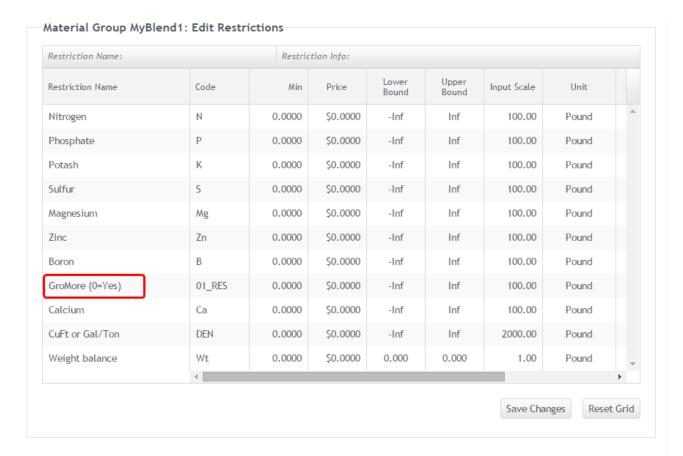


After the column has been inserted, values need to be added so the correct quantity of GroMore is added to the finished blend. The finished blend is 2,000 lbs, so type '2000' in the cell where the *GroMore* row and the  $01\_RES$  column meet. The quantity of GroMore to add to the blend is based upon the weight of the GroMore item. It weighs 8.8 lbs/gal. The two Qts of GroMore to be added to each item used in the blend would be 4.4 lbs. Due to the way the calculation is structured, this is expressed as a negative number when it is added to the *Edit Data* grid. Each item's cell in the  $01\_RES$  column needs to have '-4.4' added as shown below.



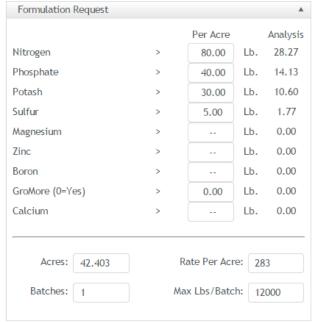
This same method can be used when adding an additive to a single item in the group. In this example, the -4.4 would only be added to that one item in the *O1\_RES* custom column.

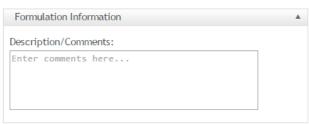
The final step is to edit the restriction name in *Edit Restrictions*. We'll change the restriction's name to *GroMore* (0=Yes).



With this restriction, when adding 2 Qts per ton of GroMore to the blend, enter '0' for that item on the *Formulation* window. The new restriction is displayed on the *Formulation Request* grid. In the example below, a 6 ton blend will be used requesting GroMore (see the 0 entered in the *GroMore* field). The 0 signifies to use GroMore on this blend.

The results show that 3 Gal. (12 quarts) of GroMore is the correct result for this request. The *Mix Results* grid shows the products rounded to their nearest *Mixing Unit* when *Mix in Mixing Units* is selected for the Material Group. Smaller batch sizes may display a rounded result that will look incorrect. View the Mixing Sheet to verify the result is actually correct.





Formulation Results		A
Mixed Fert	\$455.25 / Ton	\$2,731.49
Spreadin	g	\$0.00
Mixing Charge		\$0.00
Applied	\$455.25 / Ton	\$2,731.49
Other		\$0.00
Total		\$2,731.49
42.4 Acres	\$64.42 / Acre	
6.000 Ton	1 Batch	
42.4 Acres/Batch		
283 Lbs/Acre		
5.16 CuFt /Acre		
54.8 Lbs/CuFt		218.9 CuFt

Mix Results		A
Item Mix Name	Per Batch	Unit
UREA (46-0-0)	6081	Lb.
DAP (18-46-0)	2611	Lb.
MESZ 12-40-0-10S	1042	Lb.
0-0-60	2120	Lb.
90% Sulfur	120	Lb.
GroMore	3	Gal.
Product	12000	Lb.