

Formulating a Percentage of Slow Release Nitrogen

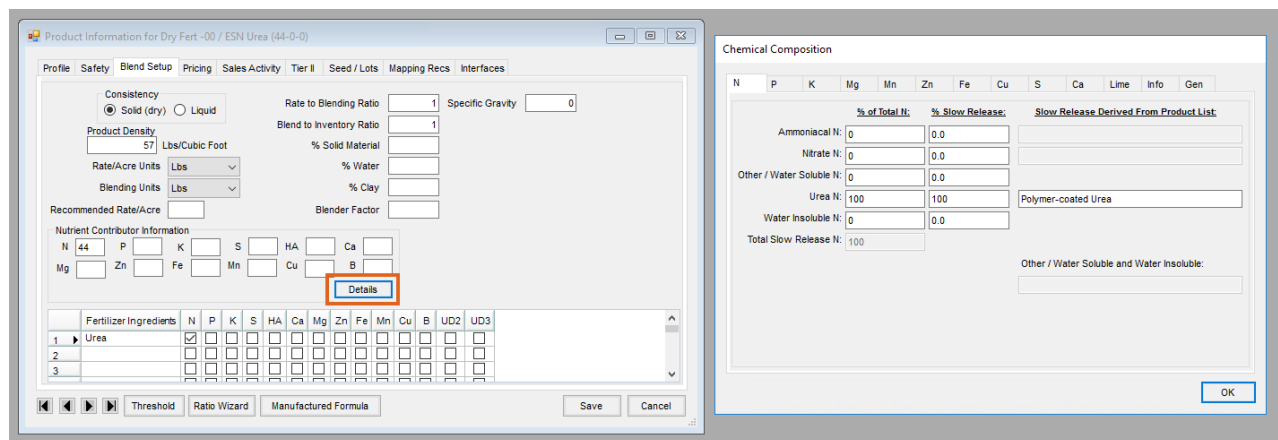
Last Modified on 12/13/2024 3:24 pm CST

Agvance Blending has the tools built into the formulation process to calculate the desired quantity of Slow Release Nitrogen when formulating a blend.

To begin the process, the percentage of Slow Release Nitrogen needs to be set up on the Product.

Edit the Product that will be used to fulfill the Slow Release request. On the *Blend Setup* tab, select **Details** in the *Nutrient Contributor Information* area to open the *Chemical Composition* window.

On the *N* tab, enter the percentage of Nitrogen for the product that is Slow Release. This example uses ESN Urea as 100% Slow Release Nitrogen.



In the Blending module, verify the Slow Release Nitrogen Product and any other Products needed to formulate the desired analysis are in the Product Set. Navigate to *Blending / Setup / Product Sets*, and edit the Product Set that will be used to formulate. In this example, the Basic Dry Product Set is used with ESN and Urea available to fulfill the Nitrogen requested.

Edit a Product Blend Set

General | Blender Interface / Print Preference

Set Description: 00-BasicDry | Water Rate/Acre: | Water %: | Type: Dry | Clay Rate/Acre: | Clay %: | Blender Capacity: 16000 | Lbs | Minimum Gal/Acre: | Inactive:

Key Inventory Items: <Water> Water | LFr00 Water | <Clay> Clay | LFr00 Clay | <Dry Filler> Dry Filler | DFrt00 Filler

Batch Defaults: Equal Load Amounts | Partial Based on Capacity | Location: 00MAIN

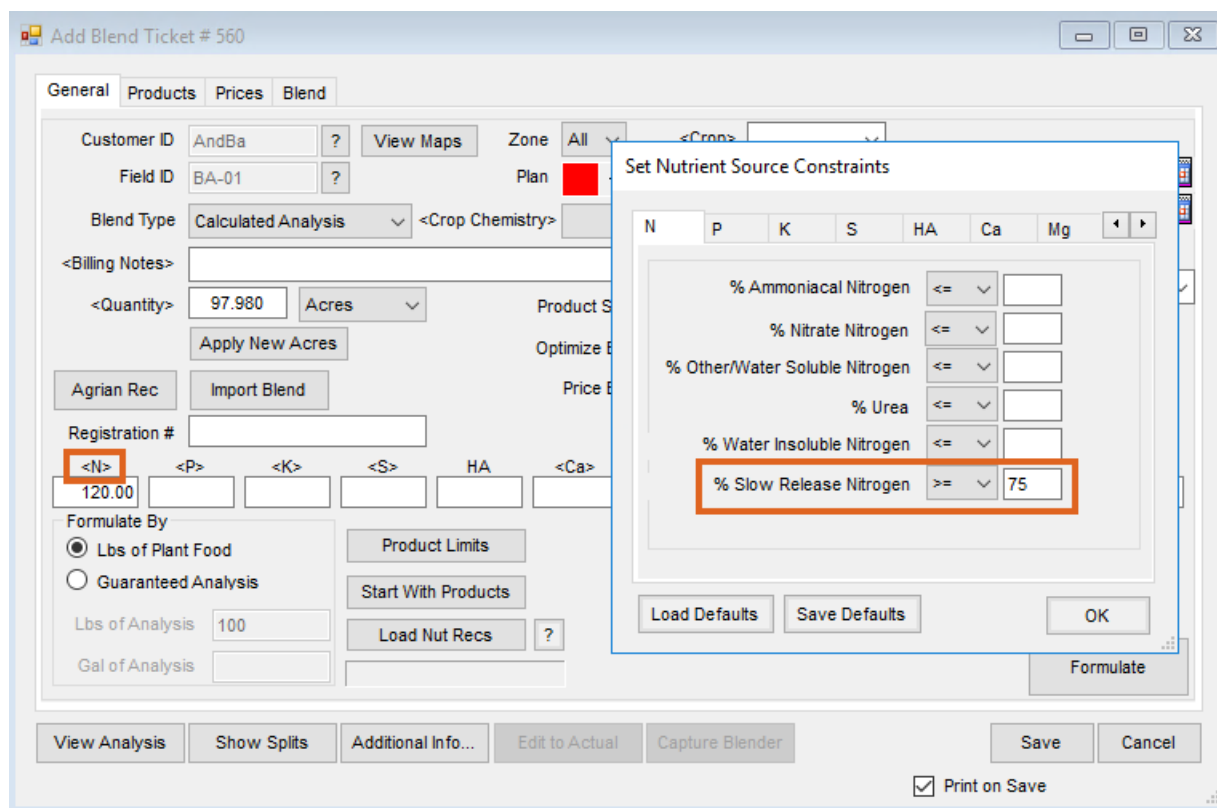
Visible to Dispatcher Only | Ship From Location: | Allow Nutrient to Run Over: N | P | K | S | HA | Ca | Mg | Zn | Fe | Mn | Cu | B

	<Product>	BO (Blending Order)	Invoice	Active	Set Limits
1	Sulfur 90	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Set Limits
2	Potash (0-0-60)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
3	Dap (18-46-00)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
4	Urea (46-0-0)	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
5	Dry Filler	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
6	Map (11-52-0)	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Set Limits
7	Zinc Sulfate (17.5 S - 35 Zn)	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
8	ESN Urea (44-0-0)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Set Limits
9		0	<input type="checkbox"/>	<input type="checkbox"/>	Set Limits
10		0	<input type="checkbox"/>	<input type="checkbox"/>	Set Limits

Buttons: Insert Row | Tag All | Untag All | Advanced... | Save | Cancel

Add a new Blend Ticket utilizing the Product Set containing the Slow Release Nitrogen Product. Enter the desired analysis on the *General* tab, and double-click the *N* column heading to open the *Set Nutrient Source Constraints* window. Enter the percentage of Slow Release Nitrogen to be used in the blend, and set the drop-down to greater than or equal to (as ESN is more expensive than Urea in this example).

This example requests 120 pounds of Nitrogen per acre with at least 75% coming from Slow Release Nitrogen.



When the desired percentage of Slow Release Nitrogen has been entered, select **OK** on the *Set Nutrient Source Constraints* window. Select **Formulate** on the *General* tab of the Blend Ticket.

Verify the desired Products have been used to fulfill the request on the *Products* tab.

This blend requested 120 pounds of Nitrogen with a minimum of 75% being from Slow Release Nitrogen, which calculates to be 90 Lbs of N per acre ($120 * 0.75 = 90$). The blend required Urea at 65.217 pounds per acre (30 lbs of N per acre) and ESN Urea at 204.545 pounds per acre (90 lbs of N per acre), so the 90 pounds were fulfilled by ESN Urea, and the remaining 30 pounds were fulfilled by Urea.

Add Blend Ticket # 560

General Products Prices Blend

Acres 97.980 Set 00-BasicDry Target lbs of Analysis 100 Reorder Products

	<Product Name>	Rate/Acre	Unit	Total Product	Unit
1	Urea (46-0-0)	65.217	Lbs	6389.962	Lbs
2	ESN Urea (44-0-0)	204.545	Lbs	20041.319	Lbs
3	Blend Fee	269.762	Lbs	26431.281	Lbs

View Analysis

	<N>	P	K	S	HA	Ca
Ordered	120.00					
Blended	120.00	0.00	0.00	0.000	0.0000	0.000
Analysis	44.48	0.00	0.00	0.000	0.0000	0.000

Close

Nitrogen Breakdown

Nitrogen Breakdown

- % Ammoniacal Nitrogen 0.00
- % Nitrate Nitrogen 0.00
- % Other/Water Soluble Nitrogen 0.00
- % Urea 44.48
- % Water Insoluble Nitrogen 0.00
- % Slow Release Nitrogen 33.36

Close

View Analysis Show Splits Additional Info... Edit to Actual Capture Blender Save Cancel

Print on Save