

# Product Sets - SKY Order

Last Modified on 05/06/2026 1:28 pm CDT

Product Sets are groups of inventory items often combined as blended products. This involves grouping fertilizer or other products (i.e. water, clay, or dry filler) typically used when filling a requested analysis or nutrient recommendation.

Under *Utilities* in SKY Order, Product Sets can be viewed, added, and edited if the *Utilities - Blending Product Set Management* permission has been enabled in SKY Admin.

Changes can be made to Product Sets by selecting **Edit** in the grid.

Product Sets						Q Search...
<a href="#">1</a>	<a href="#">0</a>	<a href="#">Export</a>	...			
Description	Location ID	Location	Product Set Type	Active	Edit	
Filter	Filter	Filter	Filter	Filter	Filter	
00-BasicDry	00MAIN	SSI Farm Services - IL	Dry	Yes	<a href="#">Edit</a>	
00-BasicLiquid	00MAIN	SSI Farm Services - IL	Liquid	Yes	<a href="#">Edit</a>	
00-Chemical	00MAIN	SSI Farm Services - IL	Liquid	Yes	<a href="#">Edit</a>	
00-DryAutoXML	00MAIN	SSI Farm Services - IL	Dry	Yes	<a href="#">Edit</a>	
00-Feed	00MAIN	SSI Farm Services - IL	Feed	Yes	<a href="#">Edit</a>	
00-NH3	00MAIN	SSI Farm Services - IL	Liquid	Yes	<a href="#">Edit</a>	
00-Ranco	00MAIN	SSI Farm Services - IL	Dry	Yes	<a href="#">Edit</a>	<a href="#">+</a>

Choose **+ Add Product Set** in the lower right to create a new Product Set.

## Product Set Details

Description \* 
 Location \* 
 Type \*

Blender Capacity \* 
 Unit of Measure \* 
 Inactive

**Water & Clay Defaults**  
 Rate/Acre

**Batch Defaults**  
 Equal Load Amounts
  Partial Based on Capacity

**Printing Preferences**  
 Suppress Blend Ticket Load Checkboxes

**Key Inventory Items**

Inventory Type	Department ID	Product ID	Unit Weight	
Water	LFrt00	Water	1 Lbs/Lbs	<a href="#">Change Product</a>
Clay	LFrt00	Clay	1 Lbs/Lbs	<a href="#">Change Product</a>
Dry Filler	DFrt00	Filler	1 Lbs/Lbs	<a href="#">Change Product</a>

**Allow Nutrient To Run Over**  
 N
  P
  K
  S
  UD
  Ca
  Mg
  Zn
  Fe
  Mn
  Cu
  B

## General

1. Enter a *Description* of up to 15 characters.

**Note:** This must be unique across all Locations and cannot contain an apostrophe.

2. Choose the *Location* and *Type* from the drop-downs. The *Location* drop-down honors Product Location restrictions. The *Type* identifies the type of blend set.

**Note:** If *Liquid* or *Suspension* is selected, the *Minimum Gal/Acre* field becomes available. Enough water is added to meet the minimum entered if the calculated *Gallons/Acre* falls below this number during the formulation process. Water must be one of the Products listed in the set and that same item must be listed as the *Water Key Inventory Item* in Advance.

- o **Dry** – This calculates density in Lbs/Cubic Foot. It causes the blending process to be aware of any dry filler.
  - o **Liquid** – This calculates density in Lbs/Gallon. It causes the program to be aware of the use of water and clay. Blending capacity may be stated in gallons when working with liquid blends.
  - o **Suspension** – This calculates density in Lbs/Gallon. The suspension setting causes the minimum amount of water to be calculated so the sum of all nutrients does not exceed the suspension target percentage or given salt out temperature specified in the Product Set.
  - o **Feed** – This setting changes *Acres* to *Tons* on printouts and reformats the printed batch tickets for feed.
3. The Blender Capacity is the default for the blender used to mix the product (may also be used as the capacity for the spreader). The capacity affects the number of batches required for the blend. The default is 16,000 but can be overwritten.
  4. Indicate the *Units of Measure*. *Lbs* is the default, but *Gal/CuFt* and *KG* are also available.

5. The *Inactive* option inactivates the Product Set and prevents it from being when entering a Blend/Plan.

## Water & Clay Defaults

Choose either *Rate/Acre* or *Percentage %*. The option selected provides *Water Rate/Acre* and *Clay Rate/Acre* or *Water %* and *Clay %* fields respectively.

- **Rate/Acre** – Indicate the default amount of either item to include. They must be included in the list of Products as well as in the *Key Inventory Items* to be used.
- **Percentage %** – These settings cause water and/or clay to be added in as a percentage of the total product. They must be included in the list of Products making up the Product Set and in the *Key Inventory Items*.

## Batch Defaults

Choose either *Equal Load Amounts* or *Partial Based on Capacity*.

- **Equal Load Amounts** – This is the default and suggests batch sizes for the Blend Ticket.
- **Partial Based on Capacity** – The maximum capacity will be met per load with the last load being the smaller remaining amount.

## Printing Preferences

Checking *Suppress Blend Ticket Load Checkboxes* overrides printing the boxes representing multiple batches for the Product Set on the Blend Ticket.

## Key Inventory Items

Indicate the Key Inventory Items for *Water*, *Clay*, and *Dry Filler*. Choosing **Select Product** opens the Product search where one item can be selected.

**Note:** The Products selected must be set up for Blending with a Unit Weight greater than 0.

## Allow Nutrient To Run Over

Check any nutrient allowed to run over the requested analysis during formulation. When unchecked, the formulation blends low on one nutrient to avoid running over on another, if necessary.

## Products

Choose + **Add Product** to search for and select up to 50 Products.

**Note:** At least one Product must be selected for the Product Set to be saved.

Product Search

dap

Show Selected 2

0 0 Export

Product ID	Product Name	Department ID	Department Name	Units	On Hand	Active Ingredient
Dap	Dap (18-46-00)	DFrt00	Dry Fert-00	Lbs	100,000	-

Items per page: 50

1 A maximum of 50 products may be selected

Select & Close

Once Products are selected, they are displayed in a grid. The order Products are displayed in the grid is the order in which they will be applied. To change the order, drag and drop using the **Drag** icon in the far left. Products can be added/managed by choosing **Add/Manage Products** under the grid.

To remove a Product, choose **Delete** in the far right column.

0 0 Export

	Product Name	Product ID	Department ID	Invoice	Active	Nutrient Limits	
⋮	Ammonium Sulfa...	Amsulf	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Sulfur 90	Sulfur	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Potash (0-0-60)	Potash	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Dap (18-46-00)	Dap	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Triple (0-46-0)	Triple	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Urea (46-0-0)	Urea	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete
⋮	Dry Filler	Filler	DFrt00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	+ Set Limits	Delete

This is the order in which the products will be applied. To change the order, drag and drop rows using the drag icon ⋮

Add / Manage Product

The *Invoice* and the *Active* checkboxes default as checked.

- Invoice** – This indicates if the Product should be displayed on the Invoice. Products included in a blend but at no charge could be unchecked. However, if pricing by analysis, the quantity may be inaccurate if an analysis item is not checked to be invoiced. Therefore, only uncheck Products that do not need to be on the Invoice.
 

**Note:** The *Invoice* checkbox honors User preferences in Agvance (*Hub / Setup / Users* on the User's *General Restrictions* tab) and is disabled if *Disallow Invoice Column Edits On Product Sets* is checked.
- Active** – When checked, this indicates the Product should be used in the formulation. Unchecking excludes the Product from the formulation.

Choosing **+ Set Limits** opens a window to set the minimum and maximum limits on nutrients.

**Note:** Limits only apply when using least cost blending. Both a Min % and Max % on each of the major nutrients is allowed. A value of 0 indicates the limit is turned off. Min % is the minimum percentage of the total nutrient this Product is allowed to supply. Max % is the maximum percentage of the total nutrient this Product must supply.

#### Set Nutrient Limits

Limits only apply when using "Least Cost Blending." Both a Minimum % and Maximum % Limit on each of the major nutrients is allowed. A value of 0 indicates the limit is turned off. Min is the minimum % of the total nutrient this product is allowed to supply. Max is the maximum % of the total nutrient this product must supply.

	N	P	K	S	UD	Ca	Mg	Zn	Fe	Mn	Cu	B
Min %	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Max %	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Cancel

Save

## Blender Interface

This section only needs populated if interfacing with an automated blender.

- **Automated Blender Type** – Options available here are *None* (which is the default), *SSI Standard XML*, or *Murray Remote*.
- **Blend Factor to Use** – This allows the same Product to have multiple blend factors by using the Product Attributes set up on the Product profile.
- **Round Done Amounts to Scale** – This option rounds amounts of completed product from the automated blender based on the scale settings on the Product's Inventory Department.
- **Shipped from Location Code** – This option includes the remote blend ID location in the file and is only available when using *SSI Standard XML* or *Murray Remote*.

Some fields are different depending on which *Automated Blender Type* is chosen.

## SSI Standard XML

Automated Blender Type: SSI Standard XML  
Blend Factor to Use: Blend Factor  
 Round Done Amounts to Scale  
Shipped From Location Co...


Data Storage Path





- **Data Storage Path** – Enter the path where the data should be stored. It is recommended that this be set to the *UNC* path (ex. \\Computer\Drvc\Mixer).

## Murray Remote

Automated Blender Type: **Murray Remote** | Blend Factor to Use: **Blend Factor** |  Round Done Amounts to Scale | Shipped From Location Co...

Use Blend Factor as Product ID | Expiration Date:    
MM/DD/YYYY

To Remote 

From Remote 


- **Use Blend Factor as Product ID** – This allows the Blend Factor to be sent as the Product ID.
- **Expiration Date** – An expiration date for the files may be set. Files dated past this expiration date are not recognized as valid files.
- **To Remote/From Remote** – It is recommended that this be set to the UNC path (ex. \\Computer\Drvc\Mixer).

## Add On Products

Products selected here are automatically added to a Blend Ticket or Plan when formulating to an analysis if marked as *Active*. This is often used for items such as delivery charges, mixing fees, or surcharges.

The Fee Item option should not be checked if the Add On Product is to be charged per acre (such as custom application). If the Product is to be charged per pound or per unit of blended material, this option should be checked.

Products can be removed by selecting **Delete**.

Product Name	Product ID	Department ID	Active	Fee Item	
Dry Spreading	Dry	Appl00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	 Delete

[Add / Manage Add-On Product](#)

## Advanced Setup

### Base Grade Product (Optional)

Department ID: -- | Product ID: -- | [+ Select Base Grade Product](#)

System: **None** |  Formulate to Salt Out Temp | Maximum Salt Out Te...

Suspension Blend Target %: **38** | P% Guarantee Limit: **999** | Chlorine Warning % | % Water To Preload | % Base To Preload

- **Base Grade Product** – The Base Grade Product is a Product that can be preloaded. Choose **+ Select Base**

**Grade Product** to open the Product search and choose the appropriate Product. Only one can be selected.

- This inventory item must be listed in the Product Set and have the percentage filled out to preload. For this to show on a Plan, there must be a % of Base to Preload figure other than zero. This Product is listed at the top of the Blend Ticket (just under water if water is also preloaded) regardless of the Blend Order.

**Note:** The Product selected must be set up for Blending, but a Unit Weight greater than zero is not required.

- **System** – Be sure to choose the appropriate option. Those designated as *Using Equations* calculates salt out temperatures. Selecting an option not using equations uses the original/alternative method. Drop-down options here include:
  - **None** – No salt out temperature will be calculated.
  - **No Poly UAN** – This is for solutions containing Urea Ammonium Nitrate (UAN) solution and no ammonium polyphosphate.
  - **55% Poly UAN** – This is for solutions using standard quality polyphosphate and UAN solution as their primary ingredients.
  - **70% Poly UAN** – This is for solutions using higher quality polyphosphate with UAN solution as their primary ingredients.
  - **No Poly Urea** – Use this for solutions using Urea solutions and no ammonium polyphosphate solution.
  - **55% Poly Urea** – Select this for solutions using standard quality polyphosphate and Urea solution as their primary ingredients.
- **Formulate to Salt Out Temp** – This option verifies the salt out temperature during formulation and adjusts as needed. This is only available for *Suspension* Product Sets and when the System selected is not *Using Equations*. One of the Salt Out Parameter Systems must be set to formulate to a salt out temperature.

**Note:** If formulating to a given salt out temperature, the *Suspension Blend Target %* must be set to 9999.
- **Maximum Salt Out Temperature** – Enter the maximum salt out temperature used for a *Suspension* Product Set. This is only available when the System selected is not *Using Equations*.
- **Suspension Blend Target %** – This is the total analysis % (sum of the nutrients' percent concentration) that the guaranteed analysis cannot exceed when formulating a *Suspension* blend. If the percentage is higher than this number, a prompt appears for the blend operator to decide if water is to be added to the blend until the total of the nutrients' guaranteed analysis is at or below this setting.
- **P% Guarantee Limit** – This upper limit setting for the P2O5 Guaranteed Analysis adds water to the blend until this blend's P2O5 guarantee is at the upper limit entered here. This is used by companies when the amount of a Product should be limited, such as Acid, to keep the fertilizer mixture from getting too hot.
- **Chlorine Warning %** – This is the percentage at which a warning is displayed after formulating a blend.
- **% Water to Preload** – If completed, the percentage of water is listed first on the Blend Ticket regardless of its Blend Order.

- **% Base to Preload** – If completed, the percentage of the Base Grade Product is listed first on the Blend Ticket regardless of its Blend Order.