

# Ranco / Agvance Interface for Agvance Blending

Last Modified on 05/28/2025 11:19 am CDT

The Ranco™/Agvance interface may be set up and used with the Agvance Blending module.

## Setup

The following setup instructions should be completed before using the Ranco™/Agvance interface.

1. Navigate to *Blending / Setup / Product Sets*. Edit the necessary Product Set, and on the *Blender Interface / Print Preference* window, set the *Blender Type* to *SSI/Ranco Automation*. If captured scale weights will be read from Ranco™, establish the data storage path for each Product Set being used for the blender interface.

**Note:** Optionally select the *Round Done Amounts To Scale* option. This rounds the finished amount from Ranco to the Agvance scale settings on the Agvance blend when returning final amounts.

Edit a Product Blend Set

General | Blender Interface / Print Preference

**Automatic Blender Interface**

Blender Type  
SSI/Ranco Automation

Blend Factor to Use  
(Blend Factor)

Data Storage Path  
\\tsclient\\C\\AGV\\Blend\\Ranco\\

☐ Round Done Amounts to Scale

From Remote

Shipped from Location Code

Alternate Complete Extension

☐ Use Blend Factor as Product ID

Expiration Date

**Ranco Blender Settings**

☐ Ranco Blender Settings Printed

Maximum Capacity (Lbs/Min)

Dial Setting Maximum

**Print Preferences**

☐ Suppress Blend Ticket Load Checkboxes

Advanced... Save Cancel

2. On the *Blending / Utilities / Automated Blender Interface* window, select the **Ranco Setup** button.

Panel Status  
Global Status  
In ERROR

Refresh Status

Time OK

WU Start Elevator Start Blend Start Get Blend Time Meter Start

WU Stop Elevator Stop Blend Stop Meter Stop Meter Pause

Import Tickets **Ranco Setup** Save Done Amts to File Ticket Number: ☐ Print Ticket On Save

Double-click in each row of the *Ranco Bin Assignments* window to select the Agvance Product corresponding with each bin number assigned in the Ranco Panel. There are two options for prorating the weight of the mix after it is complete:

- Manually enter the weight from the scale head. If this is the desired process, select the *Prorate Done Weight* option.
- Capture the weight from the scale head. If this is the desired process, select the **Configure Scale** button, and set up the data to read from a scale head (in addition to selecting the *Prorate Done Weight* option).

**Note:** To configure the scale head, it is recommended to have a hardware person and/or representative from the scale company on site.

Ranco Blender # 1 Communications Protocol Method 2

Product Selection

	<Product>	DeptID	ProdID	Ranco Factor	Accuracy
1	Ammonium Sulfate	DFrt00	Ammsulf		Whole
2	Dap (18-46-00)	DFrt00	Dap		Whole
3	Urea (46-0-0)	DFrt00	Urea		Whole
4	Sulfur 90	DFrt00	Sulfur		Whole
5	Potash (0-0-60)	DFrt00	Potash		Whole
6					Whole
7					Whole
8					Whole
9					Whole

User Defined Labels for Command Buttons

WU Auger WU Blend Auger Blend

Bucket Elevator Meter Elevator Meter

Registry Pause Time ☒ Prorate Done Weight

Warn If Save Weight To File Is Not Done

Refresh Status Timer 0 Sec

**Configure Scale**

Get Factor for Bin # 1 Get Factor Panel Setup Save Done

- Select the **Panel Setup** button on the *Ranco Bin Assignments* window. If reading final weights back into the Blend Ticket, the *Data Storage Path* must be complete. The *Node Addresses* and *Com Port* must be set up correctly

Comm Port Setup

Master Node Panel

Panel 1 Node Address: ☒ Node 1 16

Panel 2 Node Address: ☐ Node 2 1

Panel 3 Node Address: ☐ Node 3

Panel 4 Node Address: ☐ Node 4

Panel 5 Node Address: ☐ Node 5

Comm Port 3

Blank Node Address means that this port is not used.

Data Storage Path:  
\\tsclient\C\AGVBlend\Ranco\

Done

4. In some cases, it may be necessary to enter the total weight leaving on a truck so it will be reflected on the Print Ticket (*Capture Weight* window) documents. This is necessary if a semi load had to be broken into multiple batches to accommodate the blender hopper capacity. To allow this, navigate to *Hub / Setup / Users*. Edit the User needing this ability, and select the *Allow Changing Printout Weight (Ranco)* option.

Edit a User Robert Ellis (1RE)

Profile General Restrictions Advance Apps

Restricted G/L Categories

	G/L Categories	Restricted
1	Asset (Current)	<input type="checkbox"/>
2	Asset (Inter.)	<input type="checkbox"/>
3	Asset (Long Ter...)	<input type="checkbox"/>
4	Liability (Current)	<input type="checkbox"/>
5	Liability (Inter.)	<input type="checkbox"/>
6	Liability (Long T...	<input type="checkbox"/>

Restricted Locations

	Location ID	Products	Customers	Login	Vendors
1	00MAIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	01IND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	02MISO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	03MINN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	04STIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Right Click on a Locations Restricted value to copy down to other locations

Restricted Profit Centers

	Profit Center	Restricted
1	00	<input type="checkbox"/>
2	01	<input type="checkbox"/>
3	02	<input type="checkbox"/>
4	03	<input type="checkbox"/>
5	04	<input type="checkbox"/>
6	05	<input type="checkbox"/>

Login Location Default: Current

Customer Location Default: Current

Applicator Location Default: Current

Employee Dept Location Default: Current

Profit Center Location Default: Current

Product Location Default: Current

Vendor Location Default: Current

Vehicle Location Default: Current

Dispatch Work Order Default: Agronomy

Mobile Inventory - Disallow Quantity Entry: ☐

Allow CRM Category/SubCategory edits: ☒

Allow Access to Custom Reports Export: ☒

Allow Changing Printout Weight (Ranco): ☒

Ignore NIST Handbook 44 Standards: ☐

Require Apbills to be on Hold: ☐

Allow access to user setup without a password: ☒

Restrict from Settlement Paynames with Mortgagor: ☐

Check Database Image while Logging in: ☐

Allow Access To Administrative Passwords: ☒

Disallow Invoice Column Edits On Product Sets: ☐

Default to Edit button at File/Open/Product Select: ☐

Display all Send Data to SSI Errors: ☐

View Cost Information

Restrict From Average Cost: ☐

Restrict From Last Cost: ☐

Restrict From Replacement Cost: ☐

Restrict From Estimated Average Cost: ☐

Restrict From Replacement 2 Cost: ☐

Restrict From Replacement 3 Cost: ☐

Restrict From Replacement 4 Cost: ☐

Start With User

Save

Cancel

Using the Ranco™/Agvance Interface

1. Create a Blend Ticket in Agvance Blending.

**Add Blend Ticket # 527**

General Products Prices Blend

Customer ID AndBa ? View Maps Zone All Crop Corn

Field ID WireWest ? Plan [Red] Placement Broadcast

Blend Type Calculated Analysis Crop Chemistry

<Billing Notes> User Fertilizer Prepay

<Quantity> 65.590 Acres Product Set 00-BasicDry ?

Apply New Acres

Agrian Rec Import Blend

Registration #

<N> 50.00 <P> 92.00 <K> 60.00 <S> UD <Ca> <Mg> <Zn> <Fe> <Mn> <Cu> B

Formulate By

☒ Lbs of Plant Food

☐ Guaranteed Analysis

Lbs of Analysis 100

Gal of Analysis

Start With Products

Load Nut Recs ?

Formulate

Optimize By Average Cost

Price By Blended Analysis (Lbs/Acr)

Loaded ☐ Respray ☐ VRT ☐ Custom Applied ☒ Repacked ☐ Mini Bulk

Time 8:10:19 AM

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

☐ Print on Save

2. In this example, Urea, DAP, and Potash are used with a service item. Any non-analysis items, such as application, will not be sent to the Ranco Panel.

**Add Blend Ticket # 527**

General Products Prices Blend

Acres 65.590 Set 00-BasicDry Target lbs of Analysis 100 Reorder Products

	<Product Name>	Rate/Acre	Unit	Total Product	Unit	Blended	Blended Unit	Scale
1	Urea (46-0-0)	30.435	Lbs	1996.232	Lbs	2000.000	Lbs	1
2	Dap (18-46-00)	200.000	Lbs	13118.000	Lbs	13120.000	Lbs	1
3	Potash (0-0-60)	100.000	Lbs	6559.000	Lbs	6560.000	Lbs	1
4	Dry Spreading	1.000	Acre	65.590	Acre	65.590	Acre	5

< >

Recalc using Rate/Acre Recalc using Total Product Recalc using Blended Recalc using Scale

<Ship From Location>

Apply

Density 61.136 % Water 0 % Clay 0

CuFt/Acre 5.405 Total CuFt 354.514 Est Salt Out Temp N/A

Lbs/Acre 330.435 Total Lbs 21680 Est Temp Change 0

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

☐ Print on Save

3. On the *Blending / Utilities / Automated Blender Interface* window, select the **Import Tickets** button.

**Batch Total Weight** 0

Panel Status  
Global Status  
OK

Import Tickets

● ● ●

WU Start Elevator Start Blend Start Get Blend Time Meter Start

WU Stop Elevator Stop Blend Stop Meter Stop Meter Pause

Min Time OK

Refresh Status

Ranco Setup Save Done  
Amts to File

Ticket Number:

☒ Print Ticket On Save

4. Select the Blend Ticket to be mixed, and choose **OK**.

**Select A Blend Ticket** ✕

**Select a Customer**

Customer Name	Customer ID
Altmann Michael	239789
Anderson Barry	AndBa
Anerton Telma	237501
Angleberger Ernest	238844
Angviano Mac	239542
Ankeny Thad	235763
Anslinger Alva	238027
Antonia Mitchell	239310
Arana Emerson	239112

Customer Name

Customer Location 00MAIN

Ticket # 527 Find

Control #  Find

**Select a Field For Anderson Barry**

Field ID	Description	Field #
Long	Barrys East of lane	3
WireEast	Wire East	4
WireMid	Wire Middle	5
WireWest	Wire West	6

Field ID

Ticket #	Location	Zone	Plan	Comments	Status
526	00MAIN	All		User Fertilizer Pre...	Blend
527	00MAIN	All		User Fertilizer Pre...	Blend

Field ID

Refresh
Location 00MAIN
OK
Cancel

5. The *Blend Ticket Information* tab displays various details of the Blend Ticket. In addition, the *Number of Batches* and weight for each Product per batch based on the batch breakdown determined on the *Blend* tab of the Blend Ticket appears on this tab.

Interface Window

Ranco Interface Blend Ticket Information

Ticket Information

Ticket Number: 527 1st Customer Name: Barry Anderson Acres: 65.59

Grower ID: AndBa

Field ID: WireWest

Number of Batches: 2

	Product	Bin #	Full Batch	Partial Batch	Enabled	Blended	Tot Blended
1	Ammonium Sulfate	1	0	0	<input checked="" type="checkbox"/>	0	0
2	Dap (18-46-00)	2	6560	0	<input checked="" type="checkbox"/>	0	0
3	Urea (46-0-0)	3	1000	0	<input checked="" type="checkbox"/>	0	0
4	Sulfur 90	4	0	0	<input checked="" type="checkbox"/>	0	0
5	Potash (0-0-60)	5	3280	0	<input checked="" type="checkbox"/>	0	0
6		6	0	0	<input type="checkbox"/>	0	0
7		7	0	0	<input type="checkbox"/>	0	0
8		8	0	0	<input type="checkbox"/>	0	0
9		9	0	0	<input type="checkbox"/>	0	0

Total Weight for Ticket 21680

Current Blended Total 0

Blend Weight Remaining 21680

Import Tickets Ranco Setup Save Done Amts to File Ticket Number: 527 ☒ Print Ticket On Save Set Capacity DONE

6. Select the **Set Capacity** button.

Interface Window

Ranco Interface Blend Ticket Information

Master Panel 1 Panel 2 Panel 3 Panel 4 Panel 5

0	Bin 1	Ammonium Sulfate		<input type="checkbox"/> Bin 1
0	Bin 2	Dap (18-46-00)		<input type="checkbox"/> Bin 2
0	Bin 3	Urea (46-0-0)		<input type="checkbox"/> Bin 3
0	Bin 4	Sulfur 90		<input type="checkbox"/> Bin 4
0	Bin 5	Potash (0-0-60)		<input type="checkbox"/> Bin 5

Batch Total Weight 0

Min Time OK

WU Start Elevator Start Blend Start Get Blend Time Meter Start

WU Stop Elevator Stop Blend Stop Meter Stop Meter Pause

Panel Status Global Status OK Refresh Status

Import Full Batch Import Partial Batch

Reset Weights From Panel Reset Timer Apply Weights to Ranco

Get Done Amounts

Import Tickets Ranco Setup Save Done Amts to File Ticket Number: 527 ☒ Print Ticket On Save Set Capacity DONE

**Note:** The full amount of the blend defaults into the following *Batch Calculation* window. If this mix needs made in multiple batches, enter the full amount to be mixed in the first batch as shown below.

Batch Calculation

Please enter the capacity to calculate the product weights.

The weight remaining for this blend is : 21680

12000

OK Cancel

- After the Capacity has been entered, choose the **Get Blend Time** button on the *Ranco Interface* tab. Start mixing product by choosing the following buttons from left to right: **I/U Start**, **Elevator Start**, **Blend Start**, and **Meter Start**.

Batch Total Weight 12000

8.07 Min Time OK

I/U Start Elevator Start Blend Start **Get Blend Time** Meter Start

I/U Stop Elevator Stop Blend Stop Meter Stop Meter Pause

- The Ranco Panel is enabled when the product has run through. Verify the product is completely out of the screws and in the hopper. After the product has completely finished running into the hopper, select the **Get Done Amounts** button.

Interface Window

Ranco Interface Blend Ticket Information

Master Panel 1 Panel 2 Panel 3 Panel 4 Panel 5

Weight	Bin	Material	Weight	Bin
0	Bin 1	Ammonium Sulfate	0	<input type="checkbox"/> Bin 1
7262	Bin 2	Dap (18-46-00)	7262	<input checked="" type="checkbox"/> Bin 2
1107	Bin 3	Urea (46-0-0)	1107	<input checked="" type="checkbox"/> Bin 3
0	Bin 4	Sulfur 90	0	<input type="checkbox"/> Bin 4
3631	Bin 5	Potash (0-0-60)	3631	<input checked="" type="checkbox"/> Bin 5

Import Full Batch  
Import Partial Batch

Reset Weights From Panel  
Reset Timer  
Apply Weights to Ranco

Batch Total Weight 12000

8.07 Min Time OK

I/U Start Elevator Start Blend Start **Get Blend Time** Meter Start

I/U Stop Elevator Stop Blend Stop Meter Stop Meter Pause

Blender is Stopped - Normal Mode  
Global Status  
OK Refresh Status

**Get Done Amounts**

Import Tickets Ranco Setup Save Done Amts to File Ticket Number: 527 ☒ Print Ticket On Save Set Capacity DONE

- On the *Capture Scale Reading* window, select the **Capture Weight** button. If a scale printer is connected, choose the **Print Weight Stamp** button. Otherwise, select **Done**.

**Note:** The **Print Ticket** button provides the option to print any of the blend documents (i.e., Blend Ticket, Consolidated Blend, Custom App Sheet, Haz Mat, etc., for the captured amount of that specific batch).

Capture Scale Reading

☒ Disable Scale      Calculated Weight: 12000

# Scale Weight:

## 12000

**Capture Weight**

**Print Ticket**

**Print Weight Stamp**

**Done**

10. Choose the **Save Done Amts to File** button to create a file for the amount blended.

Interface Window

Ranco Interface      Blend Ticket Information

Master Panel 1    Panel 2    Panel 3    Panel 4    Panel 5

0	Bin 1	Ammonium Sulfate	0	<input type="checkbox"/> Bin 1
7262	Bin 2	Dap (18-46-00)	7262	<input checked="" type="checkbox"/> Bin 2
1107	Bin 3	Urea (46-0-0)	1107	<input checked="" type="checkbox"/> Bin 3
0	Bin 4	Sulfur 90	0	<input type="checkbox"/> Bin 4
3631	Bin 5	Potash (0-0-60)	3631	<input checked="" type="checkbox"/> Bin 5

**Batch Total Weight**      12000

8.07 Min    Time OK

Blender is Stopped - Normal Mode

Global Status    Refresh Status

OK

WU Start    Elevator Start    Blend Start    Get Blend Time    Meter Start

WU Stop    Elevator Stop    Blend Stop    Meter Stop    Meter Pause

Get Done Amounts

Import Tickets    Ranco Setup    **Save Done Amts to File**    Ticket Number: 527    Set Capacity    DONE

☒ Print Ticket On Save

Import Full Batch    Import Partial Batch

Reset Weights From Panel    Reset Timer    Apply Weights to Ranco

11. A message displays indicating where this file was saved. Select **OK**.

Interface Window

 Done file \\tsclient\C\AGVBlend\Ranco\223.RDF has been created.

**OK**

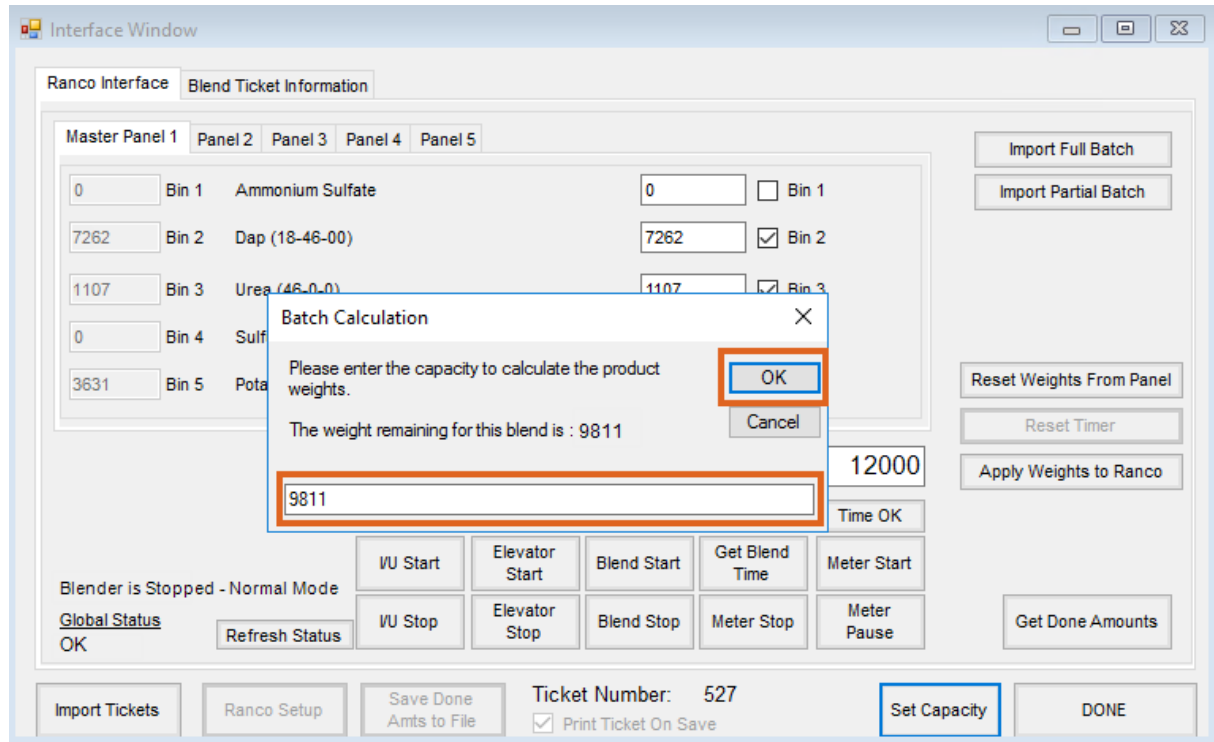
**Note:** At this point, other tickets can be mixed and the next batch for this ticket can be completed at a later time.

12. When the next batch for this ticket is ready to be mixed, choose the **Import Tickets** button and select the



desired ticket. If no other tickets have been mixed since the last batch for this ticket, indicated by the *Ticket Number* at the bottom of the *Interface* window, select the **Set Capacity** button.

13. If the amount displayed on the *Batch Calculation* window is the amount that needs to be mixed, select **OK**. If this batch needs broken down, type over the amount in the textbox, entering the desired batch amount to be mixed. Select **OK**.



The rest of the procedure for this process is the same as when completing the first batch for the Blend Ticket. See Steps 7 - 13.

## Editing the Blend Ticket with Blender Information

1. After all batches for the blend are mixed, edit the Blend Ticket in the Agvance Blending module, and select the **Capture Blender** button at the bottom of the window.

**Edit Blend # 527**

General Products Prices Blend

Customer ID: AndBa ? View Maps Zone: All Crop: Corn

Field ID: WireWest ? Plan: [Red] Placement: Broadcast Ordered Date: 06/01/2024

Blend Type: Calculated Analysis Crop Chemistry: [Dropdown] Loaded Date: [Dropdown]

<Billing Notes>: User Fertilizer Prepay

<Quantity>: 65.59 Acres Product Set: 00-BasicDry ? Time: 8:10 AM

Apply New Acres

Agrian Rec Import Blend

Optimize By: Average Cost Loaded: ☐ Custom Applied: ☒

Price By: Blended Analysis (Lbs/Acr Respray: ☐ Repacked: ☐

VRT: ☐ Mini Bulk: ☐

Registration #: [Text Box]

<N>	<P>	<K>	<S>	UD	<Ca>	<Mg>	<Zn>	<Fe>	<Mn>	<Cu>	B
50.00	92.00	60.00	0.000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Formulate By:

☒ Lbs of Plant Food

☐ Guaranteed Analysis

Lbs of Analysis: 100

Gal of Analysis: [Text Box]

Start With Products

Load Nut Recs ?

Formulate

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

☐ Print on Save

2. If the weight was captured from a scale and pro-rated, those amounts will display in the *Edit to Blender Records* window. For items such as service items, the blended amount originally on the ticket defaults in the *Done* column. Any of the amounts, including the service item, can be changed on this screen. After the amounts have been confirmed, select **OK**.

**Edit to Blender Records (527)**

Blend Ticket #: 527 Date: 06/01/2024

Grower ID: AndBa Field ID: WireWest

Acres: 65.59

	Name	Original	Done	UOM
1	Urea (46-0-0)	2000.000	2000.000	Lbs
2	Dap (18-46-00)	13120.000	13120.000	Lbs
3	Potash (0-0-60)	6560.000	6560.000	Lbs
4	Dry Spreading	65.590	65.590	Acre

☐ Archive Blender File

**OK** Cancel

3. The blended amounts will be updated on the *Product* tab of the Blend Ticket and the ticket will be marked as *Loaded*. Make any other necessary changes to the Blend Ticket and select the **Save** button.

Edit Blend # 527

General Products Prices Blend

Customer ID AndBa ? View Maps Zone All Crop Corn

Field ID WireWest ? Plan Placement Broadcast Ordered Date 06/01/2024

Blend Type Calculated Analysis Crop Chemistry Loaded Date

<Billing Notes> User Fertilizer Prepay

<Quantity> 65.59 Acres Product Set 00-BasicDry ? Time 8:10 AM

Apply New Acres Optimize By Average Cost ☒ Loaded ☒ Custom Applied

Agrian Rec Import Blend Price By Blended Analysis (Lbs/Acr ☐ Respray ☐ Repacked

Registration #  ☐ VRT ☐ Mini Bulk

<N>	<P>	<K>	<S>	UD	<Ca>	<Mg>	<Zn>	<Fe>	<Mn>	<Cu>	B
50.00	92.00	60.00	0.000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Formulate By

☒ Lbs of Plant Food ☐ Guaranteed Analysis

Lbs of Analysis 100 Start With Products

Gal of Analysis  Load Nut Recs ?

Formulate

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

☐ Print on Save

Edit Blend # 527

General Products Prices Blend

Acres 65.59 Set 00-BasicDry Target lbs of Analysis 100 Reorder Products

	<Product Name>	Rate/Acre	Unit	Total Product	Unit	Blended	Blended Unit	Scale
1	Urea (46-0-0)	30.492	Lbs	2000.000	Lbs	2000.000	Lbs	1
2	Dap (18-46-00)	200.030	Lbs	13120.000	Lbs	13120.000	Lbs	1
3	Potash (0-0-60)	100.015	Lbs	6560.000	Lbs	6560.000	Lbs	1
4	Dry Spreading	1.000	Acre	65.590	Acre	65.590	Acre	5

Recalc using Rate/Acre Recalc using Total Product Recalc using Blended Recalc using Scale

Density 61.136 % Water 0 % Clay 0

CuFt/Acre 5.407 Total CuFt 354.645 Est Salt Out Temp N/A

Lbs/Acre 330.537 Total Lbs 21680 Est Temp Change 0

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

☐ Print on Save