Phosphate to Aqua Ammonia Ratio Blend

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When creating liquid Blends for Tobacco, for example, there may be a need to formulate based on a ratio of one part Aqua Ammonia to three parts Phosphate.

To accomplish this ratio in Agvance Blending, set up the Nitrogen form breakdown on the *Blend Setup* tab of the Product to fulfill the 33.34% Nitrogen needed to satisfy the request. This Product may not be the cheapest Product available; therefore, through Least Cost Formulation, the remaining Nitrogen request will be fulfilled by the cheapest Nitrogen source.

In this example, a one ton request of 4-4-10-1S-2Cl will be used. Aqua Ammonia is the Nitrogen Product that will fulfill the one part Nitrogen for three parts of Phosphorus. Edit the Product, and navigate to the *Blend Setup* tab. In the *Nutrient Contributor Information* area, Aqua Ammonia is set up at 24.6 units of Nitrogen. Select the **Details** button. On the *N* tab, the Nitrogen form is set up as 100% Ammoniacal Nitrogen.

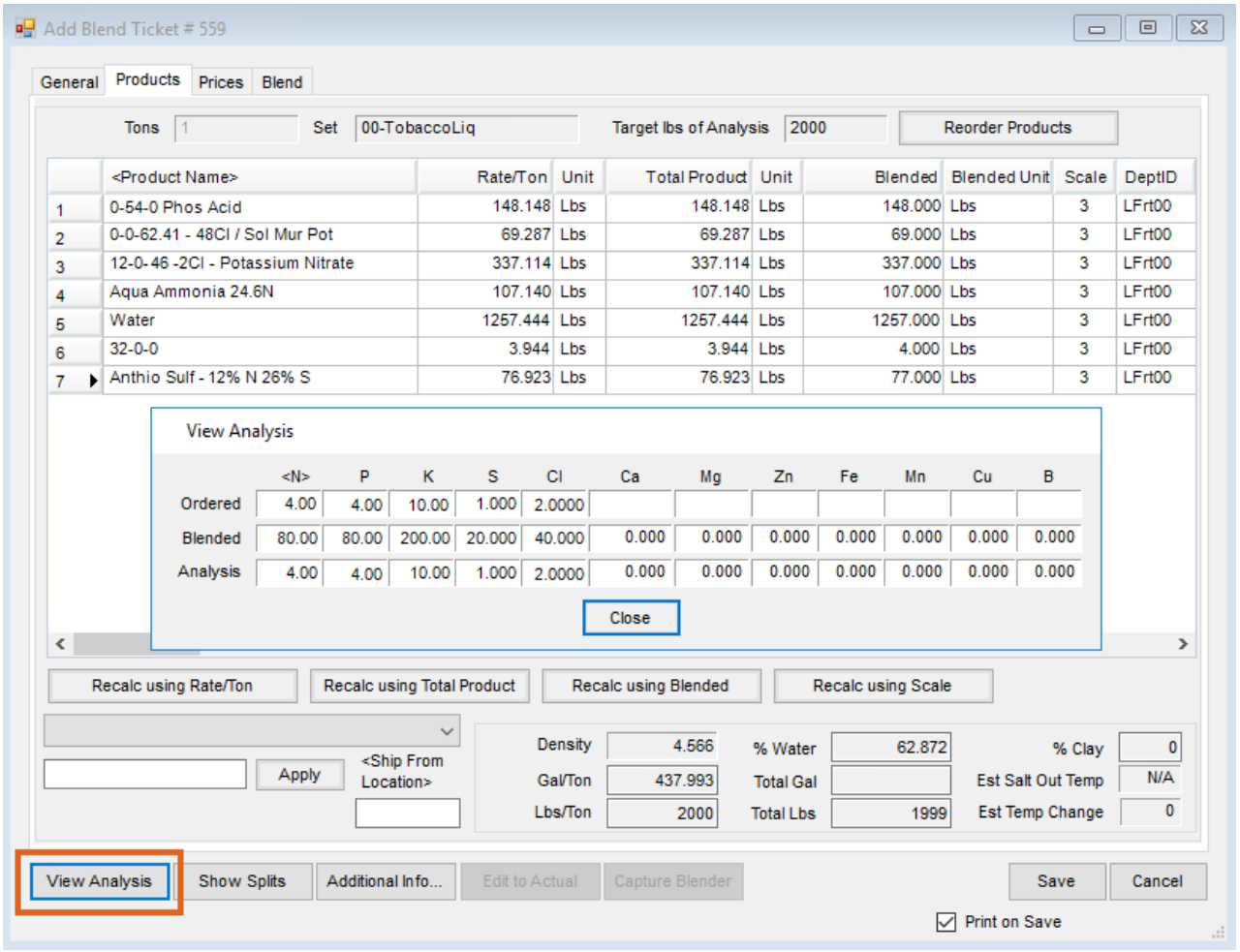
When adding a Blend Ticket, in the *Formulate By* area, select *Guaranteed Analysis*. Enter the request for the Blend, such as 4-4-10-1S-2Cl, then double-click *N*. In the *Set Nutrient Source Constraints* window, set the *% Ammoniacal Nitrogen* to >=, and enter *33.34*. Choose **OK**.

Note: The following is the formula used to arrive at the value entered for *% Ammoniacal Nitrogen* in this example.

*4 (the Phosphorus request in the Blend) * 33.34% (1/3 of the Phosphorus request to be fulfilled by Aqua Ammonia) = 1.3336*

1.3336 / 4N (the Nitrogen request in this example) = 33.34%

Select **Formulate** and review the results.



Note: This *N* request is finished by other sources with Nitrogen contributors that are cheaper than the Aqua Ammonia.