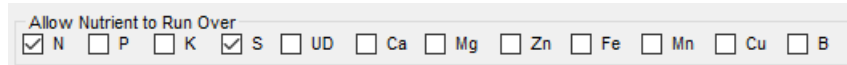


Least Cost Formulation

Last Modified on 04/28/2022 8:31 am CDT

Least cost formulation uses a search algorithm to examine all available combinations of products in the selected Product Set to find the least expensive mix that meets all the specific and implied restrictions. Least cost formulation finds product combinations that 'over-formulate' individual nutrients to take advantage of less expensive ingredients. Therefore, the *Allow Nutrient To Run Over* settings at the Product Set are very important.



| Allow Nutrient to Run Over | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--------------------------|---|--------------------------|---|-------------------------------------|---|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|---|
| <input checked="" type="checkbox"/> | N | <input type="checkbox"/> | P | <input type="checkbox"/> | K | <input checked="" type="checkbox"/> | S | <input type="checkbox"/> | UD | <input type="checkbox"/> | Ca | <input type="checkbox"/> | Mg | <input type="checkbox"/> | Zn | <input type="checkbox"/> | Fe | <input type="checkbox"/> | Mn | <input type="checkbox"/> | Cu | <input type="checkbox"/> | B |

Consistent costing and pricing information is required to effectively use least cost formulation. Least cost search is based on any cost or price level, but every product used in a blend set must be accurately priced at the selected cost or list level. A missing cost or price makes a product overly attractive to the search algorithm and leads to non-optimal results.

If requested nutrient components are not represented in the chosen Product Set, a warning appears stating the request could not be filled. Least cost always searches for an exact match of the requested nutrients, subject to the restrictions in place at the time. If no exact match is possible, the program formulates a blend as close to the request as possible with the least number of nutrients running over or under that request. For this reason, it is important that Product Sets be as complete as possible.