



Fully reacted mono-calcium feed phosphate produced and tailored specifically for the formula feed industry.



**What's the difference between a mixed feed supplement and a feed phosphate ingredient?**



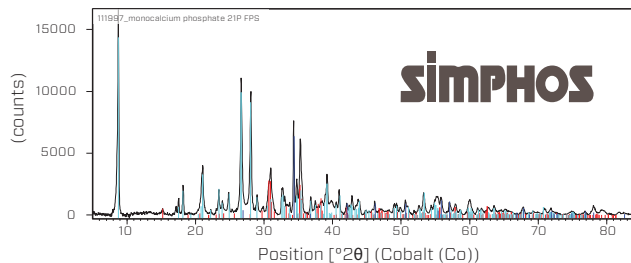
Bringing Earth's Resources to Life

Simpfos provides fully reacted feed phosphate ingredients, created to meet the specifications of feed manufacturers. Adding calcite or calcium carbonate to a monocalcium feed phosphate creates a blend by definition, which in accordance with industry standards should be labeled as a mixed feed or blend with calcium carbonate named in the mixed ingredient list. The Association of American Feed Control Officials (AAFCO) defines the definition for proper labeling of feed phosphate ingredients as either calcined, fused, participated, or **reacted** calcium phosphate.

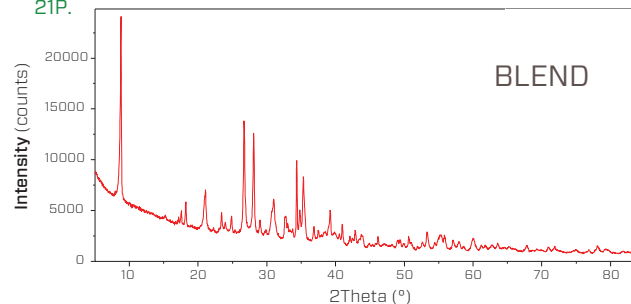
Meeting balanced nutrient requirements becomes more difficult with a blended, rather than fully reacted product.

University and independent labs have verified with x-ray detection analysis (XRF and XRD) that some samples from product labeled as feed phosphate ingredients contain calcite as calcium carbonate or limestone. These blends use limestone or calcium carbonate as filler material to lower the phosphorus or "P" content of feed phosphates. The practice of blending or lowering the P content renders the combined material as a mixed feed or blend—not a feed phosphate ingredient. Adding calcite to a feed phosphate ingredient may throw off the nutrient balance, increase the risk of not meeting nutrient specifications or guarantees, increase cost, generate potential cross-contamination points, and can factor into other quality issues.

Match of reference patterns to observed peaks in the background subtracted XRD data from sample Monocalcium phosphate, 21P.



Raw XRD scan from sample of blended Monocalcium phosphate, 21P.



# **SIMPHOS**

## **Feed Ingredients**

### **Quality and consistency in processing and materials**

Simphos® Feed Ingredients manages the quality and consistency of our products from the ore we mine in Vernal, Utah, through the manufacturing process to achieve 100% mono-calcium phosphate.



To ensure you are getting the highest quality feed ingredients, ask your supplier if they offer blended or fully reacted product.

### **Simphos benefits include:**



#### **Naturally occurring chromium**

from the ore we mine, which contributes to the feed formulation.



#### **Less dusty product**

Since we don't need to use filler material to achieve balanced nutrient levels, our product emits fewer particulates during handling and transit.



#### **All-natural color**

Our product's color comes naturally from the premium ore, and is not artificially created with dyes or other additives.



#### **High production standards**

High production standards and strict quality control provide the chemical characteristics and biological availability required by feed manufacturers.





**18.5P**  
**SIMPHOS**  
by **Simplot**



**21P**  
**SIMPHOS**  
by **Simplot**



**11-24P**  
**SIMPHOS**  
by **Simplot**



## When you start with pure American phosphate rock, you get the purest feed phosphate in America.

The purest reserve of phosphate rock in North America originates from our mine in Vernal, Utah. Our phosphoric acid originates from this rock and is fully reacted with a premium white limestone to create a high quality feed phosphate. High production standards and strict quality control provide the chemical characteristics and biological availability required by feed manufacturers.

With the largest estimated phosphate ore reserves in North America and continuous investments in our infrastructure here in the United States, we are committed to supplying our animal feed partners and customers well into the future as a privately held business.

Choose Simphos® for incomparable quality in every shipment.

