Products:

**Profresh Plus**

Ingredients:

**Profresh Plus** contains:

Propionic acid, ammonium hydroxide, verxite granules, calcium bentonite.

Directions:

<table>
<thead>
<tr>
<th>Grain Bins/Mixed Feed</th>
<th>TMR/Silage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture (%)</td>
<td>Usage Rate (lb/ton)</td>
</tr>
<tr>
<td>&lt;15%</td>
<td>1</td>
</tr>
<tr>
<td>15 - 17%</td>
<td>2</td>
</tr>
<tr>
<td>17 - 19%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Storage Structures</th>
<th>Usage Rate (lb/sq yard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bunkers/Pits/Plies</td>
<td>Surface top = 1/2-1</td>
</tr>
<tr>
<td></td>
<td>Surface shoulder = 1-2</td>
</tr>
<tr>
<td>Tower silos</td>
<td>Last two loads in = 2-4</td>
</tr>
</tbody>
</table>

Packaging:

Available in 50 lb, foil-lined, heat-sealed bags.

Storage:

Store in original sealed packaging in a cool, dry place.

For more information on the **Profresh Plus** and all other Micron products and programs please visit our comprehensive website at:

[www.micronbio-systems.com](http://www.micronbio-systems.com)
The Challenge

Molds are a group of microorganisms that cause deterioration of grain and forages, produce unpalatable compounds in feed, and form mycotoxins that adversely affect animal production. Mold growth is influenced by many factors including moisture, temperature, oxygen and nutrients. Active molds in animal feeds can cause detrimental consequences to livestock and have a major economic impact to the producer.

Controlling mold growth and or eliminating its existence is crucial to maintaining quality feed and productive animals. Propionic acid has been shown to be effective at controlling the widest range of molds typically present on animal feeds. Unlike most other organic acids that only inhibit mold growth, propionic acid kills mold, eliminating the problem.

Feed that has been compromised by mold growth has:

- Reduced vitamin content
- Reduced amino acid content
- Reduced energy content
- Reduced palatability
- Increased mycotoxin load

Animals fed moldy feed commonly exhibit the following symptoms:

- Depressed animal performance/growth rates
- Lowered feed intake
- Poor feed efficiency
- Reduced resistance to disease
- Increased reproductive problems

Controlling mold growth and or eliminating it’s existence is crucial to maintaining quality feed and productive animals. Propionic acid is an effective mold inhibitor and has been shown to be effective at controlling the widest range of molds typically present on human and animal feeds. Unlike most other organic acids that only inhibit mold growth, propionic acid kills molds, thereby eliminating the problem.

Profresh Plus is a dry granular, buffered propionic acid based preservative for use in the prevention of fungal growth in animal feeds, total mixed rations, silages and stored grains. The slow release formula gives effective prolonged control of aerobic spoilage yeast and mold, resulting in higher retained feed value.

This trial was carried out in November 2013 on a farm in Somerset, UK.

This graph shows no increase in temperature on the Profresh Plus treated TMR until after 48h.

The trial also shows that Profresh Plus has a greater effect on controlling the temperature of the TMR generated by microbial spoilage at cool ambient temperatures.

Application

Apply Profresh Plus to feed and total mixed rations (TMRs) at the time of processing. The amount required for optimal control is dependent upon level of mold challenge and moisture level. (See Table 1 on back for typical rates)

Use Profresh Plus as part of a complete silage protection program. Apply to tops and shoulders of bunkers and piles, ends of silage bags, and the last few loads added to towers. (See Table 2 on back for typical rates)

Profresh Plus, when applied to bin stored grains, can reduce spoilage due to variations in moisture levels along bin walls caused by heating and cooling condensation. (See Table 1 on back for typical rates)

Add Profresh Plus to grist and molasses based feeds to retain freshness during summer months. (See Table 1 on back for typical rates)