PRODUCT DESCRIPTION

MicroEssentials Powder is a loose form of yeast nutrient supplying a rich mixture of organic and inorganic nitrogen, vitamins and trace minerals. MicroEssentials Powder incorporates the latest research on yeast nutritional requirements in wine fermentations and ensures sufficient supply of inorganic nitrogen, amino acids, fatty acids, nucleic acids, vitamins, minerals and detoxifying components.

APPLICATION

MicroEssentials Powder is a highly complex nutrient designed for use with red and white ferments. MicroEssentials Powder provides 17ppm available nitrogen at 1 lb / 1,000 gal. When more than 70ppm of available nitrogen addition is needed, we recommend supplementing with diammonium phosphate.

INSTRUCTIONS FOR USE

Add MicroEssentials Powder directly to juices and musts at onset of fermentation or supplement up to mid-fermentation. When adding more than 2 lbs / 1,000 gal, multiple administrations (2 or 3 additions) are recommended over the first half of the alcoholic fermentation.

For added convenience, try MicroEssentials Complete-TR™, which offers complete nutritional supplementation with time-release performance and provides the desired fermentation kinetics as obtained through incremental dosing.
TECHNICAL DATA

◊ Addition Level
  ▶ Recommended dosage is 1 - 8 lbs / 1,000 gal

◊ Storage and Shelf Life
  ▶ Store in a cool, dry, well-ventilated area
  ▶ Shelf life at least 18 months if stored under recommended conditions

◊ Appearance
  ▶ Tan colored powder with yeast-like aroma

For further recommendations on dosage, or dosage based on YAN values, please contact a Gusmer representative - or refer to the Gusmer Nutrient Addition Chart in the wine product catalog or at www.gusmerwine.com.

PACKING

MicroEssentials Powder is available in 25 kg boxes and 5 kg pails.

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Typical Analysis</th>
<th>Specification</th>
<th>Microbiological</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>20 - 30%</td>
<td>Total Bacteria Count</td>
<td>&lt; 20,000 / g</td>
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<tr>
<td>Nitrogen</td>
<td>13 - 16%</td>
<td>Yeast and Mold</td>
<td>&lt; 100 / g</td>
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<tr>
<td>Moisture (probe)</td>
<td>12% max</td>
<td>Coliform Organisms</td>
<td>&lt; 10 / g</td>
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<tr>
<td>pH (5% solution)</td>
<td>6.5 - 8.0</td>
<td>E. coli</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Salmonella</td>
<td>Negative</td>
</tr>
</tbody>
</table>

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