PRODUCT DESCRIPTION

**MicroEssentials Complete-TR** is the most advanced yeast nutrient on the market, incorporating the latest research in yeast nutrition and *Time-Release Technology*. The unique sustained-release system provides complete nutritional supplementation while simulating incremental dosing - giving winemakers ultimate control over fermentations. **MicroEssentials Complete-TR** ensures yeast are supplied with sufficient inorganic nitrogen, amino acids, fatty acids, nucleic acids, vitamins, minerals and detoxifying components.

**MicroEssentials Complete-TR** is a two-tablet system consisting of tan tablets and white tablets. The tan tablet is formulated to dissolve during the lag and log phases, starting the fermentation with the greatest proportion of complex nutrients and a lesser amount of inorganic nitrogen, building the biomass at a regulated rate. The white tablet is formulated to dissolve at a slower rate, providing sustained inorganic nitrogen, as well as some complex nutrients, up to mid-fermentation.

The convenience of **MicroEssentials Complete-TR** offers winemakers the ability to supplement ferments with one single addition, as compared with incremental nutrient additions, providing optimum fermentation kinetics.

APPLICATION

**MicroEssentials Boost-TR** is suggested for easy, difficult and challenging fermentation scenarios that require a broad range of nutrients and is recommended for use in both red and white juices and musts. This product was designed for ease of use; therefore, **MicroEssentials Complete-TR** should be added at yeast inoculation to achieve the full nutritional benefits. **MicroEssentials Time-Release Technology** eliminates the need for multiple additions.

**MicroEssentials Complete-TR** can be used separately or supplemented by **MicroEssentials Boost-TR** for fermentations with high nitrogen requirements. **MicroEssentials Complete-TR** provides 15ppm available nitrogen at 1 lb / 1,000 gal.

The product(s) described herein are protected by one or more patent(s) pending.
INSTRUCTIONS FOR USE

Add MicroEssentials Complete-TR directly to juices or musts at yeast inoculation. Do NOT dissolve in water. Use equal amounts, on a weight basis, of both tan and white tablets. (Please note that tan and white tablets have different densities and therefore do not weigh the same. If using less than a full box, please weigh out equal quantities of individual tablets for dosing.)

Based on a standard addition of 4 lbs / 1,000 gal, MicroEssentials Complete-TR should be added as follows:
- Large fermentations use 1 box (10 kg / 22 lbs) per 5,500 gal
- Macro bins (175 gal) use 7 tan tablets and 7 white tablets
- Barrel ferments (~ 60 gal) use 3 tan tablets and 3 white tablets

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.

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
  - White and tan colored tablets with yeast-like aroma

PACKING

MicroEssentials Complete-TR is available in 10 kg boxes and 1 kg boxes.
10kg contains approximately 400 tablets
1kg contains approximately 40 tablets

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Typical Analysis</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>12 - 16%</td>
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<tr>
<td>Moisture (probe)</td>
<td>12% max</td>
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</table>

<table>
<thead>
<tr>
<th>Microbiological</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Bacteria Count</td>
<td>&lt; 20,000 / g</td>
</tr>
<tr>
<td>Yeast and Mold</td>
<td>&lt; 100 / g</td>
</tr>
<tr>
<td>Coliform Organisms</td>
<td>&lt; 10 / g</td>
</tr>
<tr>
<td>E. coli</td>
<td>Negative</td>
</tr>
<tr>
<td>Salmonella</td>
<td>Negative</td>
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</table>

Important Note: Gusmer Enterprises, Inc. provides this information to the best of our knowledge. This information does not claim to be complete and Gusmer Enterprises, Inc. cannot assume liability for improper use. All users are advised to test products to meet their specific needs.