# TransFerm RB3 

Featuring MGT ${ }^{\ominus}$ technology by MASCOMA

## PRODUCT SHEET

## DESCRIPTION AND USE:

TRANSFERM ${ }^{\ominus}$ RB3 is used in the production of fuel ethanol from liquefied grains. Designed to be robust, it is an advanced and improved (relative to TransFerm Yield+) strain of Saccharomyces cerevisiae that expresses glucoamylase (GA) enzyme and reduces glycerol production. Fuel ethanol production facilities using TransFerm RB3 often experience ethanol yield improvements of around $4 \%$ over standard dry yeast, a reduction in glycerol of over $45 \%$ and a reduction of separately purchased GA enzyme by $35 \%$ when compared to conventional industry yeasts.

## DIRECTIONS FOR USE:

With 6-10 hours propagation time, the recommended dosage is $0.1-0.3 \% \mathrm{w} / \mathrm{w}$ into the propagation tank. As a direct pitch option, the recommended dosage is $0.025-0.050 \% \mathrm{w} / \mathrm{w}$ into the main fermentor.

This product is only to be used as a processing aid in the production for fuel ethanol and distillers co-products. It is not to be used as a direct addition to food or animal feeds. This product may only be used in fuel ethanol production processes where the time and temperature following ethanol fermentation is sufficient to completely inactivate yeast (minimum exposure of $175^{\circ} \mathrm{F}\left(80^{\circ} \mathrm{C}\right.$ ) for 2 minutes). No viable yeast may be present in the distillers feed product.

## GUIDELINES FOR PRODUCT STORAGE:

Store refrigerated at $33.8^{\circ} \mathrm{F}$ to $39.2^{\circ} \mathrm{F}\left(1^{\circ} \mathrm{C}\right.$ to $\left.4^{\circ} \mathrm{C}\right)$. When stored under these conditions, the product is stable for 3 months from the date of production.

## QUALITY SPECIFICATIONS:

| Percent Solids | Viable Yeast Cells per mL | Total Bacterial Count per mL |
| :---: | :---: | :---: |
| $20-24 \%$ | $>1 \times 10^{9}$ | $<10^{5}$ |

## INGREDIENTS

Water, yeast, food-grade stabilizers.

## APPLICATIONS

For use in fuel ethanol fermentations. Fermentations are often staged within a temperature range between $88^{\circ} \mathrm{F}$ and $95^{\circ} \mathrm{F}\left(31^{\circ} \mathrm{C}\right.$ to $\left.35^{\circ} \mathrm{C}\right)$ with optimal use in a pH range of 4.2 to 5.5 . It is also important to maintain rigorous contamination controls and maintain low fusel alcohol levels.

