

DESCRIPTION AND USE

TransFerm[®] CV5 is a revolutionary new development to TransFerm[®] yeast technology that introduces a new, novel enzyme expression system capable of producing an enhanced glucoamylase within the yeast cell which virtually eliminates the need for external GA purchases. In addition to the GA expression, TransFerm[®] CV5 still contains the highest yielding yeast technology in its glycerol reducing pathway designed to make fermentation more efficient and higher yielding compared to basic ethanol fermenting yeast. Fuel ethanol production facilities using TransFerm[®] CV5 may experience substantial improvement in fermentation performance for higher yields under stress conditions.

DIRECTIONS FOR USE

With 6-10 hours propagation time, the recommended dosage is 0.1-0.3% w/w into the propagation tank. As a direct pitch option, the recommended dosage is 0.025-0.050% w/w into the main fermentor. This product is only to be used as a processing aid in the production of 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 176°F (80°C) for 2 minutes). No viable yeast may be present in the distiller's feed product.

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 86°F and 95°F (30°C to 35°C) and 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.

GUIDELINES FOR PRODUCT STORAGE

Store refrigerated at 33.8°F - 39.2°F (1°C - 4°C). When stored under these conditions, the product is stable for 3 months from the date of production.

