

# Nutri-Plex Pro™

## Yeast Nutrient Complex

Nutri-Plex Pro is a yeast nutrient for use when fermentation is under stress by factors such as high temperature, fusel oil from distillation variations, and by high solid liquefaction that can affect yeast in producing ethanol. Nutri-Plex Pro contains a proprietary blend of enzymes, trace minerals and assimilable nitrogen to provide yeast with the correct nutrient balance to protect against fermentation stress.

### CHARACTERISTICS

Nutri-Plex Pro contributes higher levels of sterols and unsaturated fatty acids. (Important cell wall components)

- assist in yeast budding
- to protect the cell from osmotic pressure

The reasons for sluggish fermentations are many. A few common examples Nutri-Plex Pro can protect from:

- nutrient deficiencies or imbalances
- yeast inhibiting substances such as volatile acidity
- high sugar content
- temperature shock
- elevated fusel levels that come from distillation recycle

Proper nutritional balance can lead to:

- consume sugars more efficiently
- leave less residual sugar at the end of fermentation
- produce more consistent fermentations
- no adverse effects on co-products
- better morphology and reduced cluster formation of yeast cells

### INGREDIENTS

Coarse brown powder containing enzymes, trace minerals, and assimilable nitrogen.

### APPLICATIONS

Nutri-Plex Pro is used to enhance yeast health and fermentation performance. It is intended for use in fuel ethanol fermentations. Works well at a pH range of 3.5 - 6.0. However, a pH of 3.5 - 4.5 is optimal for fermentation. Nutri-Plex Pro can be used to replace other yeast nutrients such as ammonia and urea.

### PACKAGING

Available in 25 kg (55.12 lb) bags

### DIRECTIONS FOR USE

Nutri-Plex Pro can be added to the propagator, to the fermentor at start of fill, or part way through the fermentation when yeast budding begins to decline. Use 479.2 g - 719.0 g per 1000 L (4 - 6 lb 1000 US gal). Typical dosage is 500 ppm in propagation or fermentation depending on solid levels.

Contact your Lallemand Biofuels & Distilled Spirits Technical Representative for more details.

### STORAGE & HANDLING

Nutri-Plex Pro should be stored in a cool, dry area for maximum stability. For best results, do not store directly on the ground. When stored under these conditions, the product is stable for 18 months from the date of manufacture.

### REGULATORY & CERTIFICATIONS

Kosher

### PRECAUTIONS

Color may vary per batch, but in no way affects the performance of the product.