

Bio-Ferm[®] XP

High Performance Active Dry Yeast

Bio-Ferm XP is a uniquely produced proprietary high performance active dried yeast (ADY) derived from a Non-GMO strain of *Saccharomyces cerevisiae*. This yeast is ideally suited for batch production of fuel and industrial alcohol. Bio-Ferm XP demonstrates exceptional fermentation characteristics in terms of its ability to tolerate high temperatures, high solids (osmotic stress), and ethanol toxicity.

CHARACTERISTICS

Bio-Ferm XP is an ADY which boasts a high viable cell count. Bio-Ferm XP has demonstrated the ability to aggressively ferment higher solids in whole mash and may be used with a variety of substrates such as: corn, milo, wheat, molasses, citrus molasses, cassava, fructose syrup and wet milling starch streams.

- Osmotic tolerance (plant) consistently 36% corn solids
- Short rehydration and lag time
- Compatible with all enzyme systems, particularly new generation alpha-amylases, which allow higher solids through mash viscosity reduction
- Aggressive mid-to-late fermentation kinetics. This unique kinetic profile fosters competitive exclusion of infectious bacteria when microbial control is difficult
- Provides a more complete fermentation designed to withstand the most common stress factors during fermentation

INGREDIENTS

Yeast, E491 emulsifier

APPLICATIONS

Bio-Ferm XP is intended for use in fuel and industrial ethanol production.

- Can ferment at temperatures up to 40°C (104°F) for very short periods of time. However, temperatures of 34°C - 37°C (93°F - 98°F) are generally recommended
 - Hydration/Blend Tank 35°C - 38°C (95°F - 100°F)
 - Propagation Tank 33°C (92°F)
 - Fermentation Tank 33°C - 35°C (92°F - 95°F)
- Ferments well at pH range of 3.5 to 6.0. However, a pH of 3.5 - 4.5 is optimal for fermentation
- Can achieve alcohol concentrations of more than 20% by volume (16% by weight) dependent on operational parameters

PACKAGING

Packaged in vacuum sealed foil bags. Ships in cardboard boxes
Available in 10 kg (22.04 lb) boxes

DIRECTIONS FOR USE

If added directly to the fermentor, a dose of approximately 0.12-0.36 kg per 1,000 L (1-3 lb per 1000 US gal). Lower levels can be used if there is a propagation or conditioning step before the fermentor.

Propagation or conditioning of yeast should be performed to increase the yeast cell mass that is added to the fermentor and to acclimate the yeast, reducing the lag phase of yeast upon entry to the fermentor. Bio-Ferm XP yeast is ideally suited for batch propagation systems.

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

STORAGE & HANDLING

Product should be stored under vacuum in a cool, dry area away from heat for maximum stability. When stored under these conditions, the product is stable for 36 months from the date of manufacture.

REGULATORY & CERTIFICATIONS

GRAS (Generally Recognized as Safe)
IFN 7-05-520 (IFN: International Feed Number)
Kosher

PRECAUTIONS

This product is not intended nor marketed for veterinary or human use.

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