

# Thermosacc<sup>®</sup> XL

High Performance Active Dry Yeast

Thermosacc XL is an active dry yeast (ADY) for use in ethanol fermentations. It contains a selected strain of *Saccharomyces cerevisiae* yeast in a highly concentrated and stable form selected to give lower residual sugars and higher alcohols.

## CHARACTERISTICS

For use in high-gravity fermentations at high sugar and alcohol concentrations

Stress tolerance has been increased to give higher alcohol

Can be used with a high level of reused water

Produces a low level of fermentation by-products and is suitable for many types of alcohol

## INGREDIENTS

Yeast, E491 emulsifier

## APPLICATIONS

Thermosacc XL is intended for use in ethanol productions

- 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 4.0 - 5.0. However, a pH of 4.5 - 5.0 is more 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 20 kg (44.09 lb) boxes

## DIRECTIONS FOR USE

If Thermosacc XL is added directly to the fermentor, a dose of approximately 0.10 - 0.25 kg per 1000 L (1 - 2 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.

Thermosacc XL 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 production.

## 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.