# **LiquiFerm®**High Performance Fresh Liquid Yeast

LiquiFerm is a form of fresh liquid yeast for use in fuel ethanol fermentations. It contains a distillers' strain of *Saccharomyces cerevisiae* selected for high temperatures and alcohol concentrations that has been grown for high activity. It has also been stabilized to extend its shelf life and to maintain homogeneity.



# **CHARACTERISTICS**

Higher activity provides shorter lag times than conventional fresh or dry yeast.

- Enables direct pitching without a propagation step
- Shorter propagation times
- · High budding rates
- · Rapid glucose uptake
- Stabilization enables longer shelf life compared to conventional fresh yeast
- Enhanced stress tolerance comparable to fresh cake yeast
- · Remains uniformly suspended without agitation
- Can be delivered through automated handling systems
- Yeast format is suited for enhanced fermentation through second pitch option



# **INGREDIENTS**

Fresh liquid yeast, water, and food-grade stabilizers.



## **APPLICATIONS**

LiquiFerm is intended for use in fuel ethanol fermentations.

- Ferments at temperatures up to  $40^{\circ}$ C ( $104^{\circ}$ F) for short periods of time. However, temperatures of  $34^{\circ}$ C  $37^{\circ}$ C ( $93^{\circ}$ F  $98^{\circ}$ F) are generally recommended.
  - Ferments well at pH of 3.5 6.0
- Can achieve alcohol concentrations of more than 20% by volume (16% by weight) dependent on operational parameters.



## **PACKAGING**

Available in 1000 kg (2204.6 lb) totes or bulk 17000 - 20000 kg (37485 - 44100 lb)



# **DIRECTIONS FOR USE**

#### Direct Pitch:

LiquiFerm can be added directly to the fermentor at a rate of 10 - 25 g per hectoliter final volume (1 - 2 lb per 1000 US gal).

### Propagation:

Lower levels can be used if there is a propagation or conditioning stage before the fermentor. However shorter propagation times should be utilized.

#### Second Pitch:

LiquiFerm can be added directly to the fermentor at a rate of 1 - 2.5 g per hectoliter final volume (0.1 - 0.2 lb per 1000 US gal). Dosage time is dependant on process parameters.

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



# **STORAGE & HANDLING**

LiquiFerm should be kept refrigerated at  $1^{\circ}\text{C}$  -  $4^{\circ}\text{C}$  (33.8°F -  $40^{\circ}\text{F}$ ). Routinely check temperature upon receipt and during storage. When stored under these conditions, the product is stable for 4 months from the date of manufacture.



## **REGULATORY & CERTIFICATIONS**

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



## **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.



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