Stabilized Liquid Yeast is a form of fresh liquid yeast for use in fuel ethanol fermentations. It contains a distillers’ strain of \textit{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

**DESCRIPTION**
Stabilized Liquid Yeast is a fresh liquid yeast containing \textit{Saccharomyces cerevisiae}, water, and food-grade stabilizers. Stabilized Liquid Yeast contains 23-26% yeast solids and has a specific gravity of about 1.06. The average number of live cells per gram is $2 \times 10^{10}$ (dry matter basis). Certificate of Conformity available upon request.

**APPLICATIONS**
Stabilized Liquid Yeast is intended for use in fuel ethanol fermentations
- Ferments at temperatures up to 104°F (40°C) for short periods of time. However temperatures of 93°F-98°F (34°C-37°C) are generally recommended
- Ferments well at pH range of 3.5 to 6.0
- Can achieve alcohol concentrations of more than 20% by volume (16% by weight) dependant on operational parameters

**PACKAGING**
- Produced in 1,000 kg (2204.62 lb) high density polyethylene totes
- Bulk (17,000-20,000) kg

**DIRECTORS FOR USE**

**Direct Pitch**
Stabilized Liquid Yeast can be added directly to the fermentor at a rate of 10 - 25 g per hectoliter final volume (1-2 lb per 1,000 U.S. 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. See your Lallemand Biofuels & Distilled Spirits Technical Representative for more details.

**Second Pitch**
Stabilized Liquid Yeast 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 1,000 U.S. gal). Dosage time is dependant on process parameters. See your Lallemand Biofuels & Distilled Spirits Technical Representative for more details.

**STORAGE & HANDLING**
- Stabilized Liquid Yeast should be kept refrigerated at 34°F-38°F (1°C-3°C). Routinely check temperature upon receipt and during storage
- When stored under these conditions, the product is stable for 3 months from the date of manufacture

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