

For Effective storage of the Molasses!

Praj's Biotechnology Product Division specializes in the development of Innovative Solutions that add Economic Value to Biochemical processes. The expertise comes from:

- Vast experience of design and operation of Continuous, Fedbatch and Batch type fermentation processes.
- Comprehensive knowledge of feedstocks composition and its effect on fermentation and yeast.

Key Actions of Molsafe:



Destabilizes the microbes' surface by forming electrostatic interactions with negatively charged components.



Penetrates the hydrophobic bilayer of microorganisms to cause cell leakage and lysis.



Damages the microbial membrane and thus disrupts essential cell processes like ATP synthesis or solute uptake.

MOLSAFE is a high-performance blend of chemical compounds containing functional additives specially designed for safe and effective storage of molasses. Molasses storage generally results in unwanted bacterial growth that results in loss of fermentable sugars, affecting the quality of molasses to be used in distillery. This ultimately results in decreased fermentation efficiency and revenue losses. Molsafe is the practical solution to achieve effective molasses storage.

Before Molsafe



After Molsafe



Molsafe Typical Properties:

Appearance	Clear syrupy liquid
Colour	Colourless to pale yellow
pH	7 to 9
Specific gravity	0.95-1.10 at 25 Deg. C

Advantages of Molsafe:

- Retards growth of bacteria in stored molasses. Does not have any adverse effect on yeast activity.
- Effectively arrests loss of fermentable sugars in molasses during storage.
- User friendly application methodology.
- Maintains the quality of stored molasses and improves the Fermentation process & yields.

Method of Application:

The required quantity of Molsafe is calculated based on the molasses volume in the storage. Molsafe can be added directly to the Molasses storage tank manhole or through the molasses re-circulation line. Praj's technical person shall help for application method.

Packing:

Molsafe is supplied in 30 / 50 Kg HDPE drums.



Dosage:

The optimal dose of Molsafe depends upon process conditions like Cane type, Cane variety, harvesting time, process temperature and pH. Further, the dose may depend upon molasses storage condition, recirculation of molasses and molasses aging. Recommended minimum dose of Molsafe is 20.0 ppm to the Molasses storage tanks. If required a further 10 ppm dose may be added.

Storage and Shelf Life:

Store away from direct heat and sunlight. Preferably below 25 Deg C. Do not handle or store near open flame, heat, or other source of ignition. Avoid prolong storage at elevated temperatures. When stored under recommended conditions in original container, the product is stable for one year.

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