Enzypro™ M
An Efficient Solution for Molasses Alcohol Fermentation

ENZYPRO M is a blend of various speciality enzymes designed for its application in the continuous fermentation process of molasses to increase fermentation efficiency by controlling the microbial load, invigorating yeast cells and ensuring additions fermentable sugars.

It ensures better yeast cell viability & counts without contamination in fermentation process which leads to stability & continuity of process for a longer time.

PRIMARY BENEFICIARY FUNCTIONS
• Longer and stable fermentation process leading to controlling of losses due to frequent stoppages
• Increase in recovery of alcohol
• Higher alcohol concentration in fermentation leads to lower spent wash ration
• Saving in cost due to less frequent CIP’s

SECONDARY BENEFICIARY FUNCTIONS
• Elimination/reduction of the use of anti-biotics/biocides
• Helps to liberate FAAN contents, which improves nutritional value as in term of free nitrogen sources
• Eliminates diacetyl odour from alcohol

MODE OF ACTION
• ENZYPRO M hydrolyses the cell wall of bacteria made of proteins & as nuclei alone have no existence it leads to death of bacteria in a natural way. This helps in eliminating the contamination & thereby helping in better conversion of sugars to alcohol.
• ENZYPRO M hydrolyses the proteins in the molasses to yields more FAAN content. The free alpha-amine-nitrogen (FAAN) content of the wort is very helpful for faster yeast invigoration.
• ENZYPRO M ensures additional fermentable sugars by hydrolyzing polysaccharides like starch, dextrins, cellulose etc. which yeast can further convert into alcohol.
PRODUCT CHARACTERSISTICS

Product Composition  Blend of essential enzymes & loyal ingredients  
Occurrence  Powder  
Appearance  Off White to Brownish

OPERATING PARAMETERS

Temperature  30-40°C  
pH  4.5-5.5

DOsing

4–6 ppm of the total fermentable wort (diluted molasses)
The continuous fermentation process being more complicated; Catalysts would provide the enzyme dosage & dosage points for optimizing the results.

PACKAGING

HDPE drums. Available in 1 Kg foil pack being further packed in 20 Kg HDPE drums.

PRODUCT SHELF LIFE

It should be stored in cool and dry environment. Enzypro M is stable for 12 months under these conditions.

PRODUCT HANDLING

- Enzymes are proteins. Inhalation of dust or aerosols may induce sensitization and may cause allergic reactions in sensitized individuals. Some enzymes may irritate the skin, eyes and mucous membranes upon prolonged contact. The product may create easily inhaled aerosols if splashed or vigorously stirred.

- Spilled product may dry out and create dust. Spilled material should be flushed away with water. Avoid splashing. Left over material may dry out and create dust.

- Wear suitable protective clothing, gloves and eye/face protection.

- Contaminated cloths should be properly washed.

- MSDS is supplied with the product. Follow MSDS safety instructions for more details.