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## **About Us**

**Antozyme Biotech PVT. LTD.** is a well integrated enzyme manufacturing and formulation organization. Antozyme biotech work with innovative customer across the globe, helping them produce more from the less, make their products stand out and reduce cost.

Antozyme provide a Eco-friendly enzymes from small to large scale quantities for a variety of industries, such as food, starch, distillery, brewery, waste water treatment, agriculture, detergent and pharmaceuticals.

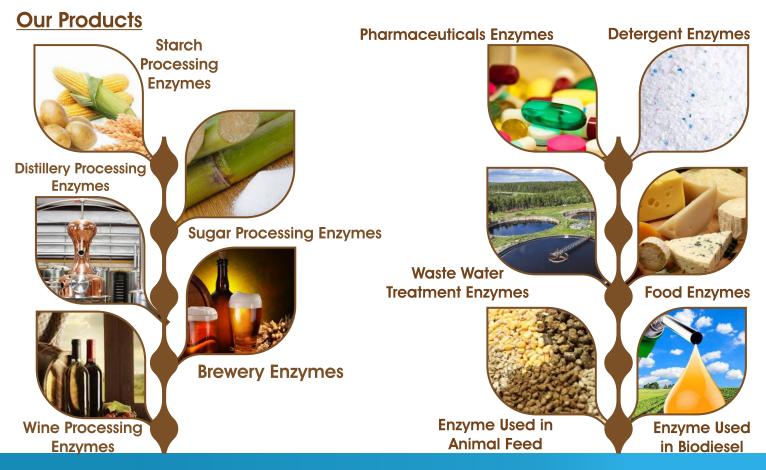
#### **Introduction to Enzymes**

Enzymes are organic catalyst produced within the living organisms which speed up chemical reactions, by lowering the activation energy, in the living organisms but themselves remain unchanged at end of the reaction.

In molecular terms, the enzyme combines with substrate molecule to form an enzyme-substrate complex. In such close contact the substrate molecules may be distorted and hence easily react to form an enzyme-product complex which split the release product molecule and the enzyme.

Enzymes are classified into six categories based on the types of reaction catalyzed, that is, oxidoreductase, transferase, hydrolyses, lyase, ligase and isomerase.

Each enzyme should be uniquely identified by their enzyme classification number. Enzymes are named with the use of letters and numbers: EC plus four number representing four compartment.





# **Process Enhancer for Distillery**

### **Basic introduction**

Antozyme Biotech PVT. LTD. is a well integrated enzymes manufacturing and formulation organization. Antozyme biotech offers enzyme based biodegradable formulation to increase production efficiency and yield of brewery. Enzyme based formulations enhance the process and utilize the resources at fullest. Apart from remedial actions, these are also required for conversion of polymer to monomer.

## **Product**

## Catazyme-Mol (For Molasses distillery)

The product is combination of specific microelements and enzymes. The product is formulated after carefully study of the parameters and requirement of the process. Catazyme- Mol is a specific designed biotechnology based formulation for improving the performance in molasses based distillery fermentation.



Globally molasses based alcohol fermentation faces several limitations, such as:

- 1. Several problems of contamination.
- 2. Lack of yeast growth and performance.
- 3. Variation in molasses composition in every season.

#### Advantages of Catazyme-Mol:-

- ✓ Highly improved neutral spirit quality.
- ✓ Reduction in the fermentation hold up time due to quick reaction.
- ✓ Low by product in mash.
- Prevention of bacterial contamination.
- Reduction of volatile acid contains.
- ✓ Increase alcohol concentration in mash thereby the reduction in spent wash quantity.
- ✓ Increase in efficiency and alcohol yield by 7 to 10 liters/MT of molasses.
- ✓ Possiblities of spent wash recycle in fermentation.
- ✓ Longer duration of continuous fermentation operations without reduction of performance.

## Product characteristics of Catazyme-Mol:

It is free flowing powder which readily goes in suspension in water or mash.

### Dosage of Catazyme-Mol:-

65 grams/per kiloliter of distillery capacity

### Key action of Catazyme-Mol:-

- Provide vital elements and growth factors for yeast growth.
- Convert non fermentable sugar into fermentable sugar.
- Eliminates bacterial contamination.
- Prevent bad effects of yeast inhibitors.
- Catazyme-Mol is the solution to achieve high yielding and stable fermentation process.



## Catazyme-ST (for starch distillery)

The product is combination of specific microelements and enzymes. The product is formulated after carefully study of the parameters and requirement of the process. Catazyme-S is a specific designed biotechnology based formulation for improving the performance in Starch based distillery fermentation.



- 1. Several problems of contamination.
- 2. lack of yeast growth and performance.
- 3.incomplete hydrolysis of starch and non starch material (protein, cellulose, xylan)
- 4. feedstock composition variation.

## Advantage of catazyme-ST:-

- ✓ Highly improved neutral spirit quality.
- ✓ Reduction in the fermentation hold up time due to quick reaction.
- ✓ Low by product in mash.
- Prevention of bacterial contamination.
- Reduction of volatile acid contains.
- ✓ Increase alcohol concentration in mash thereby the reduction in spent wash quantity.
- ✓ Increase in efficiency and alcohol yield by 7 to 10 liters/MT of molasses.
- ✓ Possiblities of spent wash recycle in fermentation.
- ✓ Longer duration of continuous fermentation operations without reduction of performance.

#### Product characteristics of Catazyme-ST:

It is free flowing powder which readily goes in suspension in water or mash.

#### Dosage of Catazyme-ST:-

65 grams/per kiloliter of distillery capacity

#### Key action of Catazyme-ST:-

- Provide vital elements and growth factors for yeast growth.
- Convert non fermentable sugar into fermentable sugar.
- > Eliminates bacterial contamination.
- Prevent bad effects of yeast inhibitors.
- Catazyme-ST is the solution to achieve high yielding and stable fermentation process.

#### **Packaging**

Catazyme-Mol and Catazyme- ST are available in easy to use laminate poly-pouches of custom made sizes.

#### Instructions:-

Store in a cool, dry and shaded place away from direct sun light.

Enzyme dust may cause sensitization and irritation when inhale in some individual.

Prolong contact with product should be avoided. In case of spillage or contact with eyes or skin, rinse the affected area promptly with plenty of clean water. Were suitable safety gear and clothing.