



KEM LIQUIZYME 250

Liquefaction enzyme for Distilleries

Product data sheet

Characteristics:

Appearance	Liquid
Colour	Amber
Odour	Slight fermentation odour
PH	5.5 - 7, optimum at 6
Activity temperature	90 - 95 °C favorable at 95 °C
Solubility	Soluble in water
Enzyme activity	.25000U/ml

Application parameters:

Optimum pH	5.5 - 6.5
Favorable pH	5.0 - 7.0
Optimal temperature	90 °C - 95 °C
Favorable temperature	90 °C - 100 °C



DESCRIPTION:

KEM-Liquizyme 250 is a bacterial alpha-amylase preparation produced by submerged fermentation of a selected strain of *Bacillus licheniformis*. It is a thermostable incision amylase that can randomly hydrolyze α -1,4 glycosidic bonds of starch and starch derivatives into soluble dextrin and oligosaccharides.

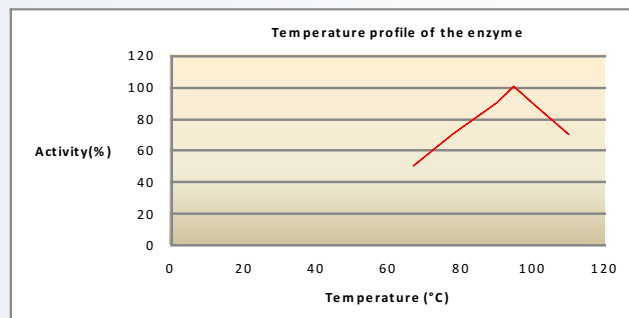
PRODUCT APPLICATION:

KEM-Liquizyme 250 is specially used in distillery for Step wise degradation of starch or starch materials such as rice or maize. The enzyme is specifically used for liquefaction of the swollen starch. Add enzyme to a properly prepared raw material (starch or starch-containing adjunct) and water mixture and temperature at 95°C. The enzyme cannot break down dry starch. After addition of enzyme, let stand for 2 hours before making up to required volume and under continuous stirring.

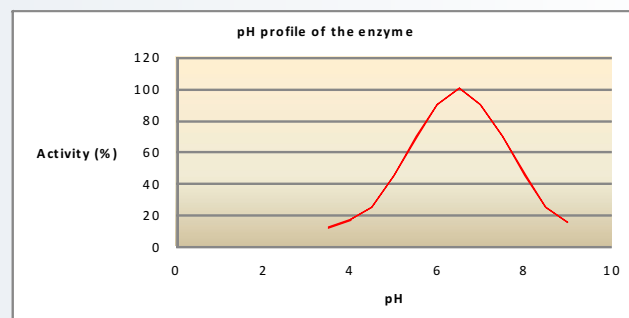
DEFINITION OF UNIT:

1 unit of enzyme amylase is defined as the amount of enzyme required to liquefy 1 mg soluble starch per minute at pH6.0 and 70°C.

TEMPERATURE PROFILE OF KEM LIQUIZYME 250:



PH PROFILE OF KEM LIQUIZYME 250:





BENEFITS:

1. For easy, one-step, efficient liquefaction of starch
2. Suitable for high temperature process.
3. Reduces processing time.
4. Eco-friendly and bio-degradable.

GENERAL USAGE GUIDELINES:

Factors influencing liquefaction efficiency:-

1. Temperature and pH of the process
2. Processing time
3. Presence of calcium is necessary

INACTIVATION:

The enzyme can be inactivated by raising the pH above 9 by sodium bicarbonate for 15mins.

TECHNICAL SERVICES:

Chembond Enzyme Co. Ltd. provides complete technical assistance for conducting on-site trials and demonstration to the customers.

PACKAGING:

25kg non-toxic plastic barrel.

SHELF LIFE:

For maximum shelf life it is better to store at low temperatures (environmental temperature below 25 degrees). The enzyme can be stored up to six months at 25°C or for one year at 5 degrees, the enzyme activity is not less than 90% of the labeled value.

SAFETY:

Enzyme preparation belongs to protein, which may induce sensitization and cause allergic type reaction in sensitized individuals. Prolonged contact may cause minor irritation for skin, eyes or mucous membrane of nose, so any direct contiguity with human body should be avoided. If irritation or allergic response for skin or eyes develops, consult a doctor

