



# KEM SACCHARIZYME

## Saccharification enzyme for Distilleries

## Product data sheet

### Characteristics:

Appearance	Liquid
Colour	Amber
Odour	Slight fermentation odour
PH	4.0 -5.0, optimum at 4.6
Activity temperature	37 - 50 °C favorable at 40 °C
Solubility	Soluble in water
Enzyme activity	.140,000U/ml

### Application parameters:

Optimum pH	4.2 - 4.6
Favorable pH	4.5 - 5.0
Optimal temperature	40 °C
Favorable temperature	37 °C - 50 °C



### DESCRIPTION:

KEM Saccharizyme is the hydrolytic enzyme of alpha -1, 6 glucosan and glucose, it is made from Aspergillus niger through cultivation and extraction technique. This product can be used in the industry of alcohol, distillate spirits, beer brewing, and organic acid

### PRODUCT APPLICATION:

KEM Saccharizyme is specially used in distillery for saccharification of starch by hydrolysis of maltodextrin and amylopectin to glucose thus increasing the sweetness. This enzyme is added to the liquefied starch after making up the volume with water at 37°C.

### DEFINITION OF UNIT:

1 unit of Glucoamylase equals to the amount of enzyme which hydrolyses soluble starch to get 1mg glucose at 40 °C and pH 4.6 in 1hr.

### BENEFITS:

1. For easy and efficient saccharification of starch
2. Reduces process time
3. Eco – friendly and biodegradable

### GENERAL USAGE GUIDELINES:

Factors influencing saccharification efficiency

1. Temperature and pH of the process
2. Processing time

### 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°C). The enzyme can be stored up to six months at 25°C or for one year at 5°C, 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