



Cataglucanase

An efficient solution for Brewery Industry

Cataglucanase is a food grade complex of enzymes produced by fermentation of selected strains of *Trichoderma reesei*. The multi-component blend exhibits significant activity towards cellulose, hemicellulose, β -glucans, arabinoxylans & proteins. The enzymes in Cataglucanase hydrolyse these NSP's & proteins often found in plant-derived substrates. Cataglucanase is specifically formulated to hydrolyse the non-starch polysaccharides & proteins of barley, wheat, soy and other plant-derived substrates. Typical applications for Cataglucanase include raw material processing, hydrolysis of plant-derived gums and treatment of fermentation media.

BENEFICIARY FUNCTIONS

- Cataglucanase is effective for the hydrolysis of cellulose, hemi-cellulose, β -glucan, arabinoxylans and other non-starch polysaccharides that can cause viscosity problems in industrial processes.
- Cataglucanase is effectively hydrolysing proteins present in different grains used in brewing.
- Treatment of non-starch polysaccharides with Cataglucanase will reduce viscosity and improve process efficiency for unit operations such as filtration, ultra-filtration or centrifugation.

PRODUCT APPLICATION

The preparation is mainly used in Malt extraction & beer-brewing in the mashing process to ensure efficient breakdown of β -glucans, pentosans and other gums. It also consists of very significant activity of xylanase which is effectively hydrolyses hemicellulose like arabinoxylan. Protease activity helps in effective hydrolysis of proteins and increases the Free amino nitrogen content of wort. This reduces the viscosity of the solution and thereby increases the filtration rate of both wort and beer and haze is avoided. The product is useful for high gravity brewing process with different type of grain like barley, maize & wheat

PRODUCT CHARACTERISTICS

Declared Enzyme	Cellulase
Production Strain	<i>Trichoderma reesei</i>
Occurrence	Powder
Appearance	Off-white to brown



OPERATING PARAMETERS

Temperature 40 – 75 Degree Celsius
Range pH Range 4.5 – 6.2

DOSING

0.15 – 0.3 kg per ton of malt (Dosage may vary depend on grist type & ratio)

PACKAGING

Available in 25 Kg HDPE drums

PRODUCT SHELF LIFE

Recommended storage condition is below 25 degree Celsius with one-year shelf life
Preferred refrigerated and sheltered condition against sunlight

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