

Supreme Extreme

Glucoamylase enzyme for use in saccharification and fermentation

Description

Supreme Extreme is a multi-component glucoamylase containing de-branching activity, fungal α -amylase, and trehalase. The primary glucoamylase component functions by the hydrolysis of terminal 1, 4 linked alpha-D-glucose residues from non-reducing ends of polysaccharide chains with release of beta-D-glucose. Its application yields monomeric glucose molecules that can be fermented by yeast into biofuels of interest such as ethanol. The other glucoamylase component is a de-branching enzyme that breaks down starch into linear polymers for more efficient glucoamylase activity and prevents formation of resistant limit dextrans at branching points. The fungal α -amylase portion breaks down amylose and amylopectin of starch to shorter chain dextrans and maltose for improved starch conversion. Finally, the trehalase can cleave the disaccharide trehalose molecule with a α -1,1 bond into two glucose molecules for consumption by yeast in fermentation to ethanol.

Typical Characteristics

Activity: 240,000 – 255,000 GAF-C

Appearance: Light to Dark Brown liquid

pH: 4.0-9.0

Density: 1.13 – 1.17 g/mL

Properties: Product may be hazy and contain slight precipitate; this does not affect enzyme activity or performance.

Dosage Recommendation

Supreme Extreme should be dosed at 0.039 – 0.047% weight enzyme / weight as is corn. The actual dose required will depend upon each plant's specific fermentation: time, initial pH, and the level of solids.

Regulatory Status

- ISO 9001 registered company

- Kosher certified
- GRAS (Generally Recognized as Safe)

GM Status

This product is not a GMO.

The enzyme product is manufactured by fermentation of microorganisms that are not present in the final product. The production organisms and the enzyme effectiveness are improved by means of modern technology.

Packaging

Supreme Extreme is available in 1,100 KG totes or bulk tankers.

Storage

Supreme Extreme will meet the declared activity upon arrival at the plant.

Recommended storage: 0-25°C (32°-77°F)

Packing must be kept intact, dry, and away from sunlight. Please follow the recommendations and use the product before the best before date to avoid the need for a higher dosage.

Best before: The best before date can be found in the COA or on the product label. The product gives optimal performance when stored as recommended and used prior to the best-before date.

Safety and Enzyme 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. See the SDS for further information regarding safe handling of the product and spills.

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Technical Service

CTE Global, Inc. is committed to formulating a productive and mutually beneficial relationship with ethanol producers in order to make their fermentation process as consistent, efficient, and cost-effective as possible. More detailed information about the application of this product is available upon request. If you have any questions, please contact us and let us know how we can be of assistance.

For more information contact:

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