

## AMYL-XTP+

**Alpha Amylase with enhanced thermostability and Thermostable Protease for breaking down starch in slurry and liquefaction**

### Description

Solubilize more starch and optimize yield with our latest line of alpha amylases with enhanced thermostability. The key enzyme activity in AMYL-XTP+ is provided by a thermostable endo-amylase that hydrolyzes (1,4)-alpha-D-glucosidic linkages in starch polysaccharides. Highly effective at operating temperatures even up to 200°F, AMYL-XTP+ expands the possibilities of process optimization to reach your production goals. This activity is supplemented with a thermostable protease to deliver potentially increased corn oil, reduced nitrogen inputs, and robust fermentations. Additional benefits are possible when used in combination with FP Elite protease.

### Typical Characteristics

**Activity:** 280000 AAB-D/g

**Appearance:** Light to Dark Brown liquid

**pH:** 4.0 – 9.0

**Bulk Density:** 1.12 – 1.17 g/mL

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

### Dosage Recommendation

AMYL-XTP+ should be dosed at 0.013%-0.017% weight enzyme / weight as is corn. The actual dose required will depend upon the conditions of your liquefaction: time, temperature, 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

AMYL-XTP+ is available in 1,100 KG totes or bulk tankers.

### Storage

AMYL-XTP+ 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 mucus membranes upon prolonged contact. See the Safety data sheet for further information regarding safe handling of the product and spills.

### 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.

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