# ALPHA-AMYLASE

Alpha-amylase is a bacterially-derived enzyme which breaks down starch into dextrins and simple sugars.

# Application

For use in mashing of starch-based substrates, such as raw grains and potato, for fermentation of alcohol to make distilled spirits.

#### Information

Net Weight: 12 g (0.42 US oz) Sufficient for: Up to 7.5 kg (16.5 lb) liquefied starch for fermentation volumes up to 25 L (6.6 US Gal) Enzyme Systematic Name: 1,4-Alpha-D-Glucan Glucanohydrolase Enzyme Activity (KNU-B/g): > 650 Temperature Tolerance: 65-80°C - Optimum 70-75°C (149-176 °F - Optimum 158-167°F) pH Tolerance: 5.0-7.0 (Optimum 5.5-6.0) Cation Requirements: 100-150 ppm Ca<sub>2+</sub> for optimum performance. GMO Status: GMO free Shelf Life: 24 Months Storage: Store in a cool, dry place away from direct sunlight. Place of Origin: Packed in the UK from imported ingredients. Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## **Suggested Instructions**

Bring your starch substrate slurry to the boil and simmer for 30 minutes, then turn off the heat and allow to cool to 80°C (176°F) or just below. Add enzyme and stir well and then cover (or hold at 65-80°C (149-176°F)) and allow to stand for 60 minutes.

Please note that some starch substrates, such as corn starch and, may require longer boiling times in order to fully break down and gelatinize the starch prior to application of Alpha-amylase enzyme.

## Ingredients

Sodium chloride, Alpha-amylase enzyme.

