

## Medium Temperature Alpha-Amylase Product Data Sheet

**Description** Alpha-Amylase is made of Bacillus Subtilis in the Fermentation and extraction method. It is widely used in food industry.

It comes in both liquid and powder form.  
 Dry products: Refined grade 4000, 6000u/g  
 Liquid products: 2000, 3000u/ml

**Features**

- pH: Optimum PH 6.0, Stable at PH range 6.0-7.0; ineffective at pH <5.0
- Temperature: Best operational temperature 60 -70 °C, applicable to the liquefaction process of 90 °C (highest). Stable in 60 °C or below.
- Ca<sup>++</sup>: Calcium ions are required for activity. Optimum concentration of calcium ion is 150ppm

**Applications**

1. For production of monosacharides: 6-8u/1g of material
2. For production of beer: 6u/1g of material
3. Other industrial applications: 6-8 of enzyme activity units/1g of starch.
4. Optimum concentration of calcium ion is 150ppm.

**Package** 25 kg drum for liquid products and boxes for dry products

**Storage/Shelf life** Keep under dry and cool environment.

### Specification

Property	Requirements
Activity*	Min. 2000 u/ml
Appearance	clear brown liquid
Solubility	completely miscible in water
Specific gravity	1.15~1.25g/ml

\*:1ml enzyme in 60 °C & PH6.0 for 1 hour, the number (g) of liquefaction soluble starch. per Standard: QB1805.1-93.

*Disclaimer: The information presented herein is accurate to the best of our knowledge. All of our products are sold with understanding that consumers conduct their own test to determine suitability for their uses. Statement contained herein should not be construed as express or implied representations or warranties.*

## Heat-Resistant Alpha-Amylase Product Data Sheet

Description	High Stabe Amylase, is alpha-amylase with excellent heat resistance. It comes with 2 types: 20,000, 40,000u/ml.
Features	<ul style="list-style-type: none"> <li>• Optimum pH: Effective PH range 5.5-8.0, Optimum PH range 6.0-6.5..</li> <li>• Optimum Temperature: Best operational temperature 90 °C at least, quick liquefaction in 95-97 °C, stay active in 100 °C, for injection liquefaction, transition temperature can be 105-110 °C.</li> <li>• Ca<sup>++</sup>: Requirement of calcium ions is low. Calcium at 50 ~ 70 ppm is sufficient.</li> </ul>
Applications	1, Beer: About 0.3L/1 ton of materials (20,000 u/ml). 2, Alcohol: About 0.3L/1 ton of material (20,000 u/ml), PH6.5-7.0 3, for starch sugar and for monosodium glutamate production: PH:6.0-6.5, About 0.6L/1 ton of material (20,000 u/ml).
Package	25 kg drum.
Storage/Shelf life	Keep under dry and cool environment, and avoid sun lights.

### Specification

Property	Requirements
Activity*	Min. 20,000u/ml
Appearance	clear brown liquid
Solubility	completely miscible in water
Specific gravity	1.15~1.25g/ml

\*:

The definition of enzyme activity: In 70 °C, PH6.0 for 1 minute, the enzyme quantity that can turn 1mg soluble starch into dextrin is one enzyme activity unit, per Standard: QB/T2306-97.

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