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TECHNICAL DATA SHEET

TDS-ENZ036-EN · REV. 02 · 2026-11-03

High Temperature Resistant α-amylase Powder 100,000 U/g

Thermostable alpha-amylase powder 100,000 U/g for high-temperature starch hydrolysis.

SKU **ENZ036** CATEGORY **ALPHA-AMYLASE** SOURCE ORGANISM **BACILLUS LICHENIFORMIS** GRADE **FOOD GRADE**

FORM **POWDER**

Food grade · Produced by submerged fermentation · Not restricted for transport

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	FORM
100,000u/g	**above 90°C**	**6.0-6.5**	**Powder**
as stated on the product page	liquefaction rapid at 95-97°C	effective pH range 5.5-8.0	light yellow or white powder; soluble in water

SPECIFICATION

IDENTITY

Form	Powder Typical
Appearance	Light yellow or white powder Typical

ACTIVITY

Declared activity	**100,000u/g** Typical
Activity definition	1 unit liquefies 1 mg of soluble starch in 1 minute at 70°C and pH 6.0 Typical

WORKING WINDOW

Optimum temperature	above 90°C Typical
Liquefaction temperature	95-97°C Typical
Optimum pH	6.0-6.5 Typical
Effective pH range	5.5-8.0 Typical

Spec = release limit, confirmed on every lot's Certificate of Analysis. **Typical** = normal product behaviour, not a release limit.

STORAGE & PACKAGING

SHELF LIFE
12 months

STORAGE
Store in a cool, dry place at low temperature, protected from light; avoid high temperature and humidity.

PACK SIZE
Not stated

ORDERING
Online or by e-mail; current price on the product page

APPLICATIONS

Liquefy starch in starch sugar, dextrin and oligosaccharide production
Hydrolyses α-1.4 glucosidic bonds to soluble dextrin

Replace malt in beer auxiliary liquefaction
Gives enzymatic dextrin with good liquefaction and reasonable wort composition

Remove starch sizing from fabrics after weaving and dyeing
Converts starch sizing into dextrin that can be washed with water

Liquefy starch in alcohol production with cooking at 100±5°C
Lowers starch viscosity before cooling and saccharification

DOSAGE

0.3 liters per ton

per ton of auxiliary materials in beer brewing

Substrate	**auxiliary materials mixed evenly with water**
Addition	**added at one time**
Temperature	**rapidly warmed to 95-97°C**
Hold time	**about 30 minutes**

Alcohol production: about 0.3 liters per ton of raw material at pH 6.5-7.0, 100±5°C for 100 minutes.
Increase the addition amount if stored too long or under high temperature and humidity.

Each lot is released against its specification; the lot Certificate of Analysis reports the measured values.

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Online: enzymes.bio/product/high-temperature-resistant-%ce%b1-amylase-40000-brewing-starch-hydrolysis-food-industry-biological-enzymes

For sensitive people, ingesting concentrated enzyme powder may cause allergy; avoid skin, eye and mucous contact; wear a mask and eye protection. This technical data sheet gives the product specification and typical values; it is not a batch certificate. A Certificate of Analysis for the supplied lot accompanies each shipment. Safety Data Sheet on request.

SCAN TO ORDER