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TECHNICAL DATA SHEET

TDS-ENZ021-EN · REV. 02 · 2026-11-03

Thermostable Alpha-amylase Enzyme Powder 30000 u/g

Heat-resistant enzyme for starch liquefaction and ethanol production.

SKU **ENZ021** CATEGORY **ALPHA-AMYLASE** CAS **9000-90-2** OTHER NAMES **DIASTASE** GRADE **FOOD GRADE**

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

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
30000 u/g	**95°C-97°C**	**5.0-6.0**	**12 months**
as stated on the product page	working range 90°C-110°C	working range pH 5.0~7.0	sealed, see storage below

SPECIFICATION

IDENTITY

CAS number	9000-90-2 Typical
EINECS number	232-742-8 Typical
Production organism	Bacillus subtilis Typical

ACTIVITY

Declared activity	**30000 u/g** Typical

PHYSICAL

Physical form	Powder Typical
Colour	Yellow; varies from batch to batch Typical
Odour	Normal microbial fermentation odour Typical

WORKING WINDOW

Temperature range	90°C-110°C Typical
Optimum temperature	95°C-97°C Typical
pH range	5.0~7.0 Typical
Optimum pH	5.0-6.0 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
Keep sealed in a dry and cool place and avoid direct sunlight.

PACK SIZE
1 kg / bag

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

APPLICATIONS

Starch sugar processing
Degrades starch to glucose, maltose, dextrin, fructose and oligosaccharides.

Alcohol and ethanol production
Degrades starch before alcohol fermentation.

Brewing
Degrades starch in the mash at mashing-in.

Monosodium glutamate and organic acid fermentation
Degrades starch in the fermentation feedstock.

Rice wine, vinegar, antibiotics and citric acid processing
Increases yield and reduces fermentation time.

DOSAGE

0.6-1.2L per ton

per ton of total raw materials

Industry	**Alcohol and ethanol**
Rate	**0.6-1.2L per ton of total raw materials**

Brewing: 0.4-0.8L per ton of total raw materials, added at mashing-in. Starch sugar: 0.5-1.0L per ton of dry starch. Rate must be optimized for each application; begin trials at a convenient volume.

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

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Online: enzymes.bio/product/thermostable-alpha-amylase-enzyme-cas9000902

Enzyme preparations are proteins, which may induce sensitization and allergic-type reactions; avoid prolonged skin contact. 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