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TECHNICAL DATA SHEET

TDS-ENZ323-EN · REV. 02 · 2026-11-03

Low-Temperature Enzyme Powder for Denim Washing

Cellulase powder active at 25–45°C for denim stone-wash and bio-polishing processes.

SKU **ENZ323** CATEGORY **DETERGENT ENZYMES** ENZYME CLASS **CELLULASE** FORM **POWDER**

PACK SIZE **1 KG PER BAG**

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

WORKING TEMPERATURE	WORKING PH	FORM	DOSAGE
25–45 °C	**5.0–8.0**	**Powder**	**300–500 g per batch**
recommended temperature; no optimum stated	applicable pH range; no optimum stated	supplied in 1 kg per bag; sealed, see storage below	approx. 120–200 pairs of adult denim jeans

SPECIFICATION

IDENTITY

Enzyme type	Cellulase Typical
Physical form	Powder Typical

WORKING WINDOW

Recommended temperature	**25–45 °C** Typical
Applicable pH range	5.0–8.0 Typical
Typical treatment time	15–60 minutes Typical

PHYSICAL

Pack size	1 kg per bag 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
Sealed container in a cool, dry environment at 2–25 °C; avoid direct sunlight and moisture

PACK SIZE
1 kg per bag, sealed aluminum foil bag

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

APPLICATIONS

Bio-polish cotton-based denim surface fibers
Removes loose microfibrils and surface fuzz, revealing natural texture

Create stone-wash and enzyme-wash effects on denim
Produces clean, even fading with defined contrast

Replace or reduce pumice stone use in denim washing
200 g per batch can reduce the use of one bag of pumice stones

Process cotton, cotton-blend, linen and lyocell textiles
Applies the enzyme beyond denim garments and fabrics

DOSAGE

300–500 g per batch

per batch (approx. 120–200 pairs of adult denim jeans)

Temperature	**25–45 °C**
Treatment time	**15–60 minutes**
pH	**5.0–8.0**

Optimise the rate through pilot trials.
Fabric composition, garment construction and process parameters may vary.

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

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Online: enzymes.bio/product/low-temperature-enzyme-powder-for-denim-washing-stone-wash-effects

In sensitive individuals, enzyme dust may cause mild irritation or allergic reactions; avoid skin contact and inhalation. 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