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TECHNICAL DATA SHEET

TDS-ENZ019-EN · REV. 02 · 2026-11-03

Cellulase Enzyme Powder For Stone Washing Process

Neutral cellulase powder for stone washing denim, replacing pumice stones to create worn, faded looks.

SKU **ENZ019** CATEGORY **CELLULASE** CAS **9012-54-8** PHYSICAL FORM **POWDER**

ACTIVITY TYPE **NEUTRAL CELLULASE**

Produced by submerged fermentation

Not restricted for transport

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
4,000u/g	**40-60°C**	**6.0-7.0**	**12 months**
as stated on the product page	working range 20-70°C	working range pH 5.5-7.5	sealed, see storage below

SPECIFICATION

IDENTITY	
Physical form	Powder Typical
Colour	Light yellow Typical
Odour	Normal microbial fermentation odour Typical
ACTIVITY	
Declared activity	**4,000u/g** Typical
WORKING WINDOW	
Activity temperature	20-70°C Typical
Optimum temperature	40-60°C Typical
Activity pH	5.5-7.5 Typical
Optimum pH	6.0-7.0 Typical
Liquor ratio	5:1-20:1 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, avoid direct sunlight; slight sedimentation is acceptable

PACK SIZE
1 kg per bag

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

APPLICATIONS

Stone-wash denim garments in place of pumice stones
Creates worn, faded looks while protecting fabric integrity

Bio-polish cotton, hemp, viscose, yarn and lyocell
Gives a clean, even fabric surface and softer hand feel

Abrade denim in bio-washing formulations
Imparts a high abrasion and fading effect

DOSAGE

0.1-0.3% owg
per weight of denim (owg)

Substrate	**Denim**
Liquor ratio	**5:1-20:1**
Optimum temperature	**40-60°C**
Optimum pH	**6.0-7.0**
Time	**45-60 minutes**

Raising the temperature above 80°C or the pH above 8.0 for 10 minutes fully inactivates the enzyme.

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

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Online: enzymes.bio/product/cellulase-enzyme-powder-for-stone-washing-process

Enzyme preparations are proteins and may sensitise; avoid skin, eye and inhalation 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