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TECHNICAL DATA SHEET

TDS-ENZ309-EN · REV. 02 · 2026-11-03

Food Grade Superoxide Dismutase (SOD)

Enzyme that catalyzes the conversion of superoxide radicals into oxygen and hydrogen peroxide.

SKU **ENZ309** CATEGORY **FOOD GRADE ENZYMES** GRADE **FOOD GRADE** CAS **12650-88-3**

FORM **LIGHT-COLORED POWDER**

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

DECLARED ACTIVITY	WORKING TEMPERATURE	OPTIMUM PH	SHELF LIFE
10,000 U/g	**25–45 °C**	**7.0–8.5**	**12 months**
as stated on the product page	recommended for best activity; no optimum stated	may vary slightly depending on formulation and conditions	sealed, see storage below

SPECIFICATION

IDENTITY		
CAS	12650-88-3 Typical	
Enzyme form	Superoxide dismutase (SOD) Typical	
ACTIVITY		
Declared activity	**10,000 U/g** Typical	
PHYSICAL		
Appearance	Light-colored powder Typical	
Odor/Taste	Neutral Typical	
Solubility	Readily soluble in water Typical	
WORKING WINDOW		
pH (1% solution), typical range	pH 4.0–9.5 Typical	
Optimum pH	7.0–8.5 Typical	
Recommended working temperature	25–45 °C 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 away from direct sunlight; keep package tightly closed after opening

PACK SIZE
1 kg/bag, sealed food-grade aluminum foil bag

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

APPLICATIONS

Add to functional drinks, juices and sports beverages.
Supports antioxidant capacity of the product.

Use in bakery products, nutrition bars and snack foods.
Improves oxidative stability and freshness.

Use in creams, serums and lotions.
Provides an antioxidant enzyme ingredient for cosmetic formulations.

Add to animal feed additives.
Helps enhance antioxidant status in animals.

DOSAGE

Determine by trial

no application rate stated on the product page

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

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Online: enzymes.bio/product/food-grade-superoxide-dismutase-sod

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