Safety data sheet

Sodium Dodecyl Sulfate

Product name Sodium Dodecyl Sulfate	Catalog no. SDS01, SDS05
Synonyms Sodium lauryl sulfate; SDS	Revision date -
CAS no. 151-21-3	Format version / date 1.0 / 24 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Sodium Dodecyl Sulfate
Product code	SDS01, SDS05
CAS number	151-21-3
EC number	205-788-1
Recommended use	For research use only. Not intended for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Acute Tox. 4 (oral), H302; Skin Irrit. 2, H315; Eye Dam. 1, H318 (CLP).
Label elements	GHS labeling under Regulation (EC) No. 1272/2008 (CLP).
Symbols / pictograms	
Signal word	Danger
Hazard statements	H302 – Harmful if swallowed. H315 – Causes skin irritation. H318 – Causes serious eye damage.
Precautionary statements – Prevention	P270 – Do not eat, drink or smoke when using this product. P280 – Wear protective gloves and eye/face protection.
Precautionary statements – Response	P302+P352 – IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes; remove contacts if easy. Continue rinsing and seek immediate medical attention.
Other hazards	Avoid airborne dust. Serious eye injury may occur following contact.

Composition & response

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Sodium Dodecyl Sulfate
Synonyms	Sodium lauryl sulfate; SDS
Concentration	-
Formula	C12H25NaO4S
Molecular weight	288.38 g/mol
Composition	Sodium dodecyl sulfate (CAS 151-21-3; EC 205-788-1).

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately rinse with plenty of water, including under eyelids, for at least 15 minutes. Seek urgent medical attention.
Skin contact	Remove contaminated clothing. Rinse thoroughly with water. Seek medical advice if irritation persists.
Inhalation	Move to fresh air. If breathing difficulty occurs, obtain medical assistance.
Ingestion	Rinse mouth with water. Do not induce vomiting. Obtain medical advice if unwell.
Self-protection of first aider	Wear protective gloves and eye/face protection; avoid exposure.
Most important symptoms / effects	Skin irritation and serious eye damage. Ingestion may cause gastrointestinal symptoms.
Immediate medical attention / treatment	Treat symptomatically; immediate assessment is warranted following eye exposure.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), dry chemical powder or alcohol-resistant foam.
Unsuitable extinguishing media	No data available
Special hazards arising from the substance or mixture	Combustion may produce carbon monoxide, carbon dioxide, sulfur oxides and sodium oxides.
Explosion data	Airborne combustible dust may form a hazardous mixture in air; minimize dust generation.
Advice for firefighters	Wear self-contained breathing apparatus and full protective gear.

Safe use & protection

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Avoid breathing dust and prevent skin and eye contact. Provide adequate ventilation and wear PPE.
Environmental precautions	Prevent release into drains and the environment.
Methods and materials for containment and cleaning up	Sweep or vacuum carefully without raising dust; place in an appropriate sealed disposal container.
Reference to other sections	See sections 8 and 13.

07 HANDLING AND STORAGE

Precautions for safe handling	Prevent dust generation; avoid contact with skin and eyes. Wash hands and exposed skin after handling.
Conditions for safe storage	Keep tightly closed in a cool, dry, well-ventilated area away from incompatible substances and ignition sources.
Container labeling	Store in properly labeled, sealed containers.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits: No data available. Worker DNELs: inhalation 285 mg/m³ (chronic) and dermal 4,060 mg/kg bw/day (chronic). Use ventilation to control dust.

8.2 Exposure controls

Engineering measures	Provide adequate ventilation, especially in confined spaces.
Hygiene measures	Do not eat, drink or smoke while using the product. Wash hands after handling.
Eye / face protection	Wear chemical splash goggles / face protection; risk of serious eye damage.
Hand protection	Wear chemically resistant gloves.
Skin and body protection	Wear a laboratory coat and appropriate protective clothing.
Respiratory protection	Respiratory protection may be required when ventilation is inadequate or dust is generated.

Material properties

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09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White crystalline solid
Odor	No odor
Odor threshold	No data available
pH	6–9 (10 g/L in water, 20°C)
Melting point / freezing point	205°C
Initial boiling point and boiling range	216°C
Flash point	170°C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	130 g/L in water (20°C)
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 STABILITY AND REACTIVITY

Reactivity	Stable under recommended handling conditions.
Chemical stability	Stable under normal storage and handling conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	Excessive heat, dust formation and ignition sources.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide, carbon dioxide, sulfur oxides and sodium oxides may form during combustion.

Health & environment

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	LD50 oral (rat): 977 mg/kg; LD50 dermal (rat): >2,000 mg/kg.
Skin corrosion / irritation	Causes skin irritation (H315).
Serious eye damage / eye irritation	Causes serious eye damage (H318).
Carcinogenicity	Not classified as carcinogenic in the substance-specific toxicological section.
Reproductive toxicity	Not classified.
STOT - SE	Not classified.
STOT - RE	Not classified.
Aspiration hazard	Not classified.

11.2 Potential health effects

Ingestion: Harmful if swallowed.
Inhalation: Dust may irritate respiratory passages.
Skin: Causes skin irritation.
Eyes: Causes serious eye damage.

11.3 Additional information

No additional information is available

12 ECOLOGICAL INFORMATION

Ecotoxicity	Fish: LC50 29 mg/L (96 h). Algae: ErC50 >120 mg/L (72 h). Aquatic invertebrates: NOEC 0.88 mg/L (7 d).
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	No data available

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of this material and contaminated residues as hazardous waste in accordance with applicable regulations.
Contaminated packaging	Do not reuse contaminated containers; dispose of appropriately.

Transport & reference

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14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazard
DOT (US)	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.
IMDG	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.
IATA	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.

Special precautions for user	No data available
Transport in bulk (MARPOL / IBC)	Not applicable

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Listed in multiple chemical inventories (e.g., AICS, DSL, IECSC, TSCA); specific regulatory obligations vary by jurisdiction.
Environmental hazards	Environmental hazard classification depends on the applicable regulatory regime.
Chemical Safety Assessment	No data available

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail