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Safety Data Sheet (SDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Sodium Dodecyl Sulfate
Product Code: SDS01, SDS05
CAS Number: 151-21-3
Molecular Formula: $C_{12}H_{25}O_4S \cdot Na$
Molar mass: 288.38 g/mol

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. Cat Yolu Cad. Ata Teknokent Sitesi B Blok No: 74/113 Yakutiye Erzurum Türkiye
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Emergency
Phone Number: 0090 544 327 34 97

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
3.10	acute toxicity (oral)	(Acute Tox. 4)	H302
3.2	skin corrosion/irritation	(Skin Irrit. 2)	H315
3.3	serious eye damage/eye irritation	(Eye Dam. 1)	H318

2.2 Label elements

Signal word: Danger
Pictograms



Hazard statements
H302 Harmful if swallowed
H315 Causes skin irritation
H318 Causes serious eye damage

Precautionary statements

Precautionary statements - prevention

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves.

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 contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant

Wear protective gloves/protective clothing

Potential Health Effects

Routes of entry: Eyes, skin, inhalation, ingestion.

Target Organs: Eyes, CNS, kidneys, reproductive system

Eyes: Toxic when in contact with eyes. Harmful. Causes irritation.

Skin: Toxic when in contact with skin. Readily absorbed through skin. Harmful. Can cause dermatitis. Effects can result from single exposure, or with repeated contact. Peeling and redness may occur at exposure sites.

Ingestion: Harmful if ingested. Initial symptoms, numbness, tingling and touch tenderness. Prolonged exposure leading to coldness of extremities, excessive sweating, bluish-red and peeling of palms, marked fatigue and limb weakness.

Inhalation: Can be absorbed through the lungs to produce the signs and symptoms of neurotoxicity as described above.

CHRONIC HEALTH HAZARDS; repeated exposure may cause dermatitis.

May cause cancer. May cause CNS disturbances.

For professional users only

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Name of substance:	Acrylamide
Molecular formula:	C ₃ H ₅ NO
Molar mass:	71.08 g/mol
CAS No:	79-06-1

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, consult a physician. GET MEDICAL ATTENTION.
Skin Contact	Rinse skin with water/shower. In case of skin irritation, consult a physician. GET MEDICAL ATTENTION.
Inhalation	Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice. GET MEDICAL ATTENTION.
Ingestion	Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). GET MEDICAL ATTENTION.
Self-protection of the first aider	Use personal protective equipment as required. No special handling advices are necessary.

Most important symptoms and effects, both acute and delayed

Allergic reactions (such as skin rashes, hives, asthma or anaphylactic shock), Loss of righting reflex, and ataxia, Poisoning effect on central nervous system can cause convulsions, labored breathing and loss of consciousness

Indication of any immediate medical attention and special treatment needed

Give sodium sulfate as laxative (1 tablespoon in 1 glass of water).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable Extinguishing

No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Combustible solid. When dealing with fire wear self-contained breathing apparatus. Avoid hazardous vapors and dust.

5.3 Explosion data

Sensitivity to Mechanical Impact

No information available.

Sensitivity to Static Discharge

No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container. Avoid generating dust.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limit values (Workplace Exposure Limits)

Data are not available.

Relevant DNELs/DMELs/PNECs and other threshold levels

• human health values

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	285 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	4,060 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

• environmental values

Endpoint	Threshold level	Environmental compartment	Exposure time
PNEC	0.176 mg/l	freshwater	short-term (single instance)
PNEC	0.018 mg/l	marine water	short-term (single instance)
PNEC	1.35 mg/l	sewage treatment plant (STP)	short-term (single instance)
PNEC	6.97 mg/kg	freshwater sediment	short-term (single instance)
PNEC	0.697 mg/kg	marine sediment	short-term (single instance)
PNEC	1.29 mg/kg	soil	short-term (single instance)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	White crystalline solid
b) Odor:	No odor
c) Odor Threshold:	No data available
d) pH:	6 – 9 (water: 10 g/l, 20 °C)
e) Melting point/freezing point:	205°C
f) Initial boiling point and boiling range:	216°C
g) Flash point:	170°C
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	130 g /l at 20 °C in water
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability:	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to avoid:	Keep away from heat. Decomposition takes place from temperatures above: >216 °C at 1,022 mbar.
Incompatibility:	Metals, oxidizing agents, reducing agents, bases, and acids
Hazardous Decomposition Products:	carbon monoxide, carbon dioxide,
Hazardous Polymerization:	may occur see above

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Exposure Limits:

Exposure Limits:

Exposure route	Endpoint	Value	Species	Source
oral	LD50	977 mg/kg	rat	ECHA
dermal	LD50	>2,000 mg/kg	rat	ECHA

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

• Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

• Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard

SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
LC50	29 mg/l	fish	ECHA	96 h
ErC50	>120 mg/l	algae	ECHA	72 h

Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
EC50	135 mg/l	microorganisms	ECHA	3 h
NOEC	0.88 mg/l	aquatic invertebrates	ECHA	7 d
NOEC	≥1.357 mg/l	fish	ECHA	42 d

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14. TRANSPORT INFORMATION

Shipping Information:

US DOT

not subject to transport regulations

IATA:

not relevant

Canada TDG:

not relevant

SECTION 15. REGULATORY INFORMATION

Substance is listed in the following national inventories:

Country	National inventories	Status
AU	AICS	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

SECTION 16. OTHER INFORMATION

Hazard Rating System

NFPA Health Fire Reactivity

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The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. Ecotech Biotechnology shall not be held liable for any damage resulting from the handling or from the contact with the above product. Observe all federal, provincial and state laws concerning health, safety and pollution.