

SAFETY DATA SHEET

Version: v2
Revision Date: 2026-01-06
Print Date: 2026-01-06

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Sodium dodecyl sulfate(SDS)
Product Number : S108350
Brand : aladdin
CAS-No. : 151-21-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable solid (category 2), H228
Acute Toxicity, Oral (Category 4), H302
Acute toxicity, inhalation (category 4), H332
Skin Corrosion/Irritation (Category 2), H315
Serious eye injury/eye irritation (Category 1), H318
Specific target organ systemic toxicity (single exposure) (Category 3), respiratory irritation, H335
Acute (short-term) aquatic hazard (Category 2), H401
Long term aquatic hazard (category 3), H412

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H228	Flammable solid
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/.../] equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P391	Collect spillage.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P337+P313	IF eye irritation persists: Get medical advice/attention.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to an approved waste disposal plant.
P302+P352+P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
P301+P312+P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P304+P340+P312

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. if you feel unwell.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : SDS;Sodium lauryl sulfate;Dodecyl sodium sulfate;Dodecyl sulfate sodium salt;Lauryl sulfate sodium salt;Laurylsulfuric Acid Sodium Salt;Dodecylsulfuric Acid Sodium Salt

Formula : $\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$

Molecular weight : 288.38

CAS No. : 151-21-3

EC-NO. : 205-788-1

Component	Classification	Concentration
Sodium dodecyl sulfate(SDS)		
	no data available	ACS, ≥99%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If inhaled

Move to fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact

Take victim immediately to hospital. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact

Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed

Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Remove all sources of ignition.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from open flames, hot surfaces and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. 4.1B, Flammable solid hazardous materials , Hygroscopic , Air sensitive , Room temperature, argon filling, dry storage.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

Skin protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection

In the case of dust or aerosol formation use respirator with an approved filter.

Effective dust mask

Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Powder, Crystals, Fibers, Flakes, or Solidcolor: White
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	204-207°C
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	1.01
n) Water solubility	Soluble in water, slightly soluble in alcohol, insoluble in chloroform, ether.
o) Partition coefficient: n-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 N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Sulphur oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - Female -977 mg/kg

(OECD Testing Guideline 401)

Symptoms: Irritation of the oral cavity, throat, esophagus, and digestive tract mucosa

Acute toxicity estimate inhalation -4 hours -1.51 mg/l - dust/smoke

(Expert judgment)

LD50 transdermal - rat - male and female ->2000 mg/kg

(OECD Testing Guideline 402)

Note: Corresponding values have been specified for the following substance: Sodium monooctyl sulfate

Skin corrosion/irritation

Skin - Rabbit Result: Irritation to the skin. - 24 h (OECD Testing Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible impact on the eyes (OECD Testing Guideline 405)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

Test type: Ames test Testing system: Escherichia coli/Salmonella typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guideline 471 Result: Negative Test type: In vitro mammalian cell gene mutation assay Testing System: Mouse lymphoma test Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 476 Result: Negative Test Type: Explicit Lethal Test Species: Mouse Route of infection: Oral route Method: OECD Testing Guideline 478 Result: Negative

Specific target organ toxicity - single exposure

Inhalation - may cause respiratory irritation. -Respiratory tract

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

Assessment: May cause respiratory irritation.

Additional Information

Registration of Toxic Effects of Chemical Substances: WT1050000

Sneezing, it has been reported that sodium dodecyl sulfate can cause lung sensitivity, leading to hyperventilation and lung allergies accompanied by fatigue, discomfort, and pain. Classics after Contact

Type I symptoms may last for two years and may be triggered by a variety of uncertain environmental stimuli, such as automobile exhaust, perfume and passive smoking.

Sneezing, it has been reported that sodium dodecyl sulfate can cause lung sensitivity, leading to hyperventilation and lung allergies accompanied by fatigue, discomfort, and pain. Classics after Contact

Type I symptoms may last for two years and may be triggered by a variety of uncertain environmental stimuli, such as automobile exhaust, perfume and passive smoking.

To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully studied.

After absorbing toxic substances:

burnout

vasodilation

Other hazards cannot be ruled out.

Operate in accordance with good industrial hygiene and safety regulations.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity test on fish using flow-through method LC50- Pimephales promelas -29 mg/l -96 h
(OECD Testing Guidelines 203)

For water fleas and other aquatic species without ridges

Toxicity of Vertebrate Animals

Flow test EC50- Ceriodapnia dubia -5.55 mg/l -48 h
(OECD Testing Guidelines 202)

Static toxicity test on algae ErC50 Desmodesmus subspicatus (green algae) ->120 mg/l -72 hours
(German Industrial Standard (DIN) 38412)

Static toxicity test on bacteria EC50- Activated sludge -135 mg/l -3 h

Remarks: (ECHA)

Toxicity to fish (chronic toxicity) flow test NOEC - Pimephales promelas (fat headed catfish) ->=1.36 mg/l -42 days
Remarks: (ECHA)

For water fleas and other aquatic species without ridges

Toxicity of Vertebrate Animals (Chronic Toxicity)

Flow test NOEC - Ceriodapnia dubia -0.88 mg/l -7 days
(US-EPA)

12.2 Persistence and degradability

Biodegradability : Biodegradation: 90 % Exposure time: 28 d Method: OECD Test Guideline 301 Remarks: Readily biodegradable, according to appropriate OECD test.

12.3 Bioaccumulative potential

Bioaccumulation : Species: Cyprinus carpio (Carp) Exposure time: 3 d Bioconcentration factor (BCF): 3,9 - 5,3
Partition coefficient: noctanol/water : log Pow: -2,03 (20 °C) Method: OECD Test Guideline 107

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13:

13.1 Disposal considerations

Product

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging

Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

DOT (US)

UN number: 1325	Packing group: II	Class: 4.1
Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecylsulfate)	Reportable Quantity(RQ):no data available	Poison Inhalation Hazard:no data available
Environmental Hazards: no		

IMDG

UN number: 1325	Packing group: II	EMS-No:no data available
Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecylsulfate)		

IATA

UN number: 1325	Packing group: II	Class: 4.1
Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecylsulfate)		

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Prepared By

Regulatory Affairs
ALADDIN SCIENTIFIC CORPORATION
Email: QualityAssurance@aladdinsci.com

Creation Date

22-Sep-2021

Revision Date

06-Jan-2026

Print Date

06-Jan-2026

Revision Summary

SDS sections updated v2



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.