

SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2022
Date Updated: December 31, 2022

SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION -----

Product Name	Sodium dodecyl sulfate (SDS)
Product Code(s)	SB0485
Recommended Use	For Laboratory Research Use Only Not for Human or Animal Drug Use
Supplier	Bio Basic Asia Pacific Pte Ltd.
Address	2 International Business Park Road Strategy #01-04, Singapore 609930
Telephone	(+65) 6954 2519 (+65) 6491 5938
Email	sg@biobasic-asia.com

SECTION 2. ----- HAZARDS IDENTIFICATION -----

Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Flammable solid (Category 2), H228
Acute toxicity (Category 4) Oral and Inhalation, H302+H332
Serious eye damage (Category 1), H318
Skin irritation (Category 2), H315
Specific target organ toxicity - single exposure (Category 3), Vascular, H335

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H228	Flammable solid.
H302 + H332	Harmful if swallowed or if inhaled.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P310	IF exposed or concerned: Immediately call a POISON CENTER/doctor

Hazards not otherwise classified (HNOC) or not covered by GHS - none

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SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	CAS-No.	Weight %
Sodium dodecyl sulphate (SDS)	205-788-1	151-21-3	288.38 g/mol

SECTION 4. ----- FIRST-AID MEASURES -----

Description of first-aid measures

General information

IF exposed: Immediately call a POISON CENTER/doctor. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

If inhaled

Immediately call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

In case of eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Self-protection of the first aider

First aider: Pay attention to self-protection!

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Suitable extinguishing media

Water spray
ABC-powder
Carbon dioxide (CO₂)
Nitrogen

Special hazards arising from the substance or mixture

In case of fire may be liberated:

Carbon monoxide
Carbon dioxide (CO₂)
Sulphur oxides

Advice for firefighters

DO NOT fight fire when fire reaches explosives. Protective equipment and precautions for firefighters. Wear a self-contained breathing apparatus and chemical protective clothing.

Further information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire: Evacuate area.

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SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated articles and floor according to the environmental legislation. Collect in closed and suitable containers for disposal.

Reference to other sections

For disposal see section 13.

Additional information

Clear spills immediately.

SECTION 7. ----- HANDLING AND STORAGE-----

Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation, skin contact, and eye contact. Keep away from sources of ignition - No smoking. Usual measures for fire prevention. Take precautionary measures against static discharges. Protect from moisture.

Conditions for safe storage, including any incompatibilities

Recommended storage temperature: Ambient temperature. Keep container tightly closed and in a well-ventilated place. Keep/Store away from combustible materials.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Eye/face protection

Eye glasses with side protection. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

Full contact

Material: Nitrile rubber

Thickness of the glove material: 0.38 mm

Breakthrough time: >480 min

Splash contact

Material: Nitrile rubber

Thickness of the glove material: 0.12 mm

Breakthrough time: >480 min

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Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

Information on basic physical and chemical properties

Appearance	Form: Solid Colour: White
Odour	No data available
Odour Threshold	No data available
pH	6-9 (10 g/l; H ₂ O; 20 °C)
Melting point/freezing point	204 - 207 °C
Initial boiling point and boiling range	No data available
Flash point	> 100 °C
Evaporation rate	No data available
Flammability (solid, gas)	Flammable solid
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.1 g/cm ³ (20 °C)
Water solubility	~150 g/l (20 °C)
Partition coefficient: n-octanol/water	1.6 (20 °C)
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
Other information	
Bulk density	1.1 g/cm ³ (20 °C)

SECTION 10. ----- STABILITY AND REACTIVITY -----

Reactivity

No data available

Chemical stability

Stable under standard ambient conditions (room temperature)

Possibility of hazardous reactions

No data available

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Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available.

In the event of fire: see section 5

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute toxicity

Acute oral toxicity:

LD50: > 1427 mg/kg - Rat - (OECD 401)

Acute dermal toxicity:

LD50: 580 mg/kg - Rabbit - (IUCLID)

Acute inhalation toxicity:

LC50: > 3900 mg/m³ - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Not sensitizing

Irritation to respiratory tract

May cause respiratory irritation.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Carcinogenicity

No data available

Reproductive toxicity

No indications of human reproductive toxicity exist.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Not applicable

Aspiration hazard

No data available

Additional information

No data available

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Toxicity

Toxicity to fish

LC50: 7.97 mg/l (96 h) - Fogels, A., and J.B. Sprague 1977. Comparative Short-Term Tolerance of Zebrafish, Flagfish, and Rainbow Trout to Five Poisons Including Potential Reference Toxicants. Water Res. 11(9):811-817

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Toxicity to daphnia and other aquatic invertebrates EC50: 9.8 mg/l (48 h) - Rossini, G.D.B., and A.E. Ronco 1996. Acute Toxicity Bioassay Using Daphnia obtusa as a Test Organism. Environ.Toxicol.Water Qual. 11(3):255-258 LC50: 12.1 mg/l (48 h) - Lewis, P.A., and W.B. Horning II 1991. Differences in Acute Toxicity Test Results of Three Reference Toxicants on Daphnia at Two Temperatures. Environ.Toxicol.Chem. 10:1351-1357

LC50: 12.1 mg/l (48 h) - Lewis, P.A., and W.B. Horning II 1991. Differences in Acute Toxicity Test Results of Three Reference Toxicants on Daphnia at Two Temperatures. Environ.Toxicol.Chem. 10:1351-1357

Toxicity to algae EC50: 15 mg/l (72 h) - Peterson, S.M., and J.L. Stauber 1996. new Algal Enzyme Bio assay for the Rapid Assessment of Aquatic Toxicity. Bull.Environ.Toxicol.Chem. 56(5):750-757

Toxicity to bacteria No data available

Persistence and degradability

No data available

Bioaccumulative potential

Partition coefficient: n-octanol/water: 1.6 (20 °C)

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects

No data available

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.
Waste code product: 160508

Contaminated packaging

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

No data available

SECTION 14. ----- TRANSPORT INFORMATION -----

Land transport (DOT)

UN number: 1325

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)

Class(es): 4.1

Classification code: F1

Hazard label(s): 4.1

Packing group: III

Environmental hazards: No

Marine pollutant: No data available

Sea transport (IMDG)

UN-No.: 1325

Proper Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)

Class(es): 4.1

Hazard label(s): 4.1

Packing group: III

Environmental hazards: No

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Marine pollutant: No
Segregation group: -
EmS-No. F-A S-G
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

UN-No.: 1325
Proper Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)
Class(es): 4.1
Hazard label(s): 4.1
Packing group: III

SECTION 15. ----- REGULATORY INFORMATION -----

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16. ----- OTHER INFORMATION -----

Further information: no limited for paper copy, just for internal uses.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Issuing Date: 31-Dec-2022

End of SDS