



Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Sodium dodecyl sulfate

SDS No. : 7193E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Acute toxicity (Dermal): Category 2

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 1

Specific target organ toxicity – single exposure: Category 1(CNS)

Specific target organ toxicity – repeated exposure: Category 2(liver)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 1

Hazardous to the aquatic environment (Long-term): Category 3

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

Harmful if swallowed

Fatal in contact with skin

Causes skin irritation

Causes serious eye damage

Causes damage to organs after single exposure(CNS)

May cause damage to organs through prolonged or repeated exposure(liver)

Very toxic to aquatic life

Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Do not get in eyes, on skin, or on clothing.

Wash contaminated parts thoroughly after handling.

Wear protective gloves or protective clothing.



Wear eye protection/face protection.

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

Response

Collect spillage.

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Sodium dodecyl sulfate

Content (%):98(min)

Chemical formula:C₁₂H₂₅OSO₃Na

Chemicals No, Japan:2-1679

CAS No.:151-21-3

MW:288.38

ECNO:205-788-1

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.



5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Avoid raising dust.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing.

Wash contaminated parts thoroughly after handling.

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



Take off immediately all contaminated clothing and wash it before reuse.

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Container and packaging materials for safe handling

Glass

Polyethylene

8. Exposure controls/personal protection

Control parameters

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystalline powder or powder

Color: White to off-white

Odor: Slightly characteristic odor

pH: 6~7(1% solution)

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Melting point/Freezing point: 204°C

Decomposition temperature data is not available.

Flammability (gases, liquids and solids) data is not available.

Flash point: (Sodium dodecyl sulfate)146~170°C

Auto-ignition temperature data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Vapor pressure data is not available.

Relative vapor density (Air=1) data is not available.

Density and/or relative density: 0.4g/ml

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Soluble (15 g/100 ml, 20°C)

n-Octanol/water partition coefficient: log Pow1.6

No Particle characteristics data is not available.



10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Decomposes on burning. This produces toxic and corrosive gases including sulfur oxides.

Reacts with strong oxidants and strong acids. (ICSC 0502)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong acids, Strong oxidizing agents

Hazardous decomposition products

Carbon oxides, Sulfur oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

rat LD50=1200mg/kg (SIDS, 2009)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

rabbit LD50=ca. 200mg/kg (SIDS, 2009)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

rabbit mild to severe irritation (SIDS, 2009)

Serious eye damage/irritation

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

rabbit irreversible symptoms (SIDS, 2009)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure

[cat.1]

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

CNS (SIDS, 2009)

STOT-repeated exposure

[cat.2]

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

liver (EHC 169, 1996)

Aspiration hazard data is not available.

**Additional data**

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

12. Ecological Information**Ecotoxicity****Aquatic toxicity**

Very toxic to aquatic life

Harmful to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

Crustacea (Acartia) EC50/LC50=0.12mg/L/96hr (SIDS, 2009)

Aquatic chronic toxicity component(s) data

[GHS Cat. Japan, base data]

(Sodium dodecyl sulfate)

Crustacea (Ceriodaphnia reticulata) NOEC=0.88mg/L/7days (SIDS, 2009)

Water solubility

(Sodium dodecyl sulfate)

moderate (15 g/100 ml, 20°C (ICSC, 1997))

Persistence and degradability

(Sodium dodecyl sulfate)

Degrade rapidly (BOD=85.0%/14 days; TOC=99.3%/14 days (J-CHECK 2016))

Bioaccumulative potential

(Sodium dodecyl sulfate)

log Kow = 1.6 (PHYSPROP DB, 2008)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No.: 2811

Proper Shipping Name :

TOXIC SOLID, ORGANIC, N.O.S.

Class or division : 6.1

Packing group : II

ERG GUIDE No.: 154

Special provisions No.: 274

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 2811

Proper Shipping Name :

TOXIC SOLID, ORGANIC, N.O.S.



Class or division : 6.1
Packing group : II
Special provisions No.: 274
IATA Dangerous Goods Regulations
UN No.: 2811
Proper Shipping Name :
TOXIC SOLID, ORGANIC, N.O.S.
Class or division : 6.1
Hazard labels : Toxic
Packing group : II
Special provisions No.: A3; A5
Environmental hazards
MARPOL Annex III – Prevention of pollution by harmful substances
Marine pollutants (yes/no) : yes
MARPOL Annex V – Prevention of pollution by garbage discharge
Hazardous to the aquatic environment – acute hazard: cat.1
Sodium dodecyl sulfate

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
US major regulations
Chemicals listed in TSCA Inventory
Sodium dodecyl sulfate
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling
Acute Tox. 4: H302 Harmful if swallowed
Acute Tox. 2: H310 Fatal in contact with skin
Skin Irrit. 2: H315 Causes skin irritation
Eye Dam. 1: H318 Causes serious eye damage
STOT SE 1: H370 Causes damage to organs after single exposure
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure
Aquatic Acute 1: H400 Very toxic to aquatic life
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects
Reference Book
Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39–18)
IATA Dangerous Goods Regulations (60th Edition) 2019
Classification, labelling and packaging of substances and mixtures (table3–1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2019 TLVs and BEIs. (ACGIH)
<http://monographs.iarc.fr/ENG/Classification/index.php>
Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.



The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2018).