

## SECTION 1: Product and Company Identification

### Identification of the substance or mixture

**Catalog #:** 10315, 10315-1  
**Product Name:** Sodium Dodecyl Sulfate  
**CAS-No.:** 151-21-3

### Company Identification

Cepharm Life Sciences Inc.  
 11830 W Market Place, Suite K  
 Fulton, MD 20759  
 USA  
 Toll Free: 1-800-257-1565  
 Phone: 410-636-4954

**24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970**

**For Research Use Only. Not for use in diagnostic procedures.**

## SECTION 2: Hazards identification


### Classification of the substance or mixture

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

Flammable solids (Category 2), H228  
 Acute toxicity, Oral (Category 4), H302  
 Acute toxicity, Inhalation (Category 4), H332  
 Skin irritation (Category 2), H315  
 Serious eye damage (Category 1), H318  
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  
 Acute aquatic toxicity (Category 2), H401  
 Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS Label Elements, including Precautionary Statements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H228	Flammable solid.
H302 + H332	Harmful if swallowed or if inhaled
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin 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/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

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

Possible sensitizer.

### SECTION 3: Composition / Information on Ingredients

#### Substances

Synonyms :               Lauryl sulfate sodium salt  
Sodium dodecyl sulphate  
Sodium dodecyl sulfate  
Sodium lauryl sulfate  
Dodecyl sodium sulfate  
Dodecyl sulfate sodium salt  
SDS

Formula :                C<sub>12</sub>H<sub>25</sub>NaO<sub>4</sub>S  
Molecular weight:    288.38 g/mol  
CAS-No. :              151-21-3  
EC-No. :                205-788-1

#### Hazardous components

Component	Classification	Concentration
<b>Sodium dodecyl sulphate</b>	Flam. Sol. 2; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 3; H228, H302 + H332, H315, H318, H335, H401, H412	<= 100 %

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First Aid Measures

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5: Firefighting Measures****Extinguishing Media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

No data available

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

Use water spray to cool unopened containers.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. 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. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling & Storage****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.  
hygroscopic  
Storage class (TRGS 510): Flammable solid hazardous materials

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure Controls / Personal Protection****Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.  
Hazardous components without workplace control parameters

## 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

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

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

a) Appearance	Form: rods Color: white
b) Odor	Odorless
c) Odor Threshold	No data available
d) pH	9.1 at 10 g/l
e) Melting point/freezing point	Melting point/range: 204 - 207 °C (399 - 405 °F) - lit.
f) Initial boiling point and boiling range	No data available
g) Flash point	170 °C (338 °F)
h) Evaporation rate	no data available
i) Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 2.
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	0.0018 hPa (0.0014 mmHg) at 20 °C (68 °F)
l) Vapor density	no data available
m) Relative density	0.370 g/cm <sup>3</sup>
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	log Pow: 0.83 at 22 °C (72 °F)
p) Auto-ignition temperature	310.5 °C (590.9 °F)
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	no data available
t) Oxidizing properties	No data available

### Other safety information

Solubility in other solvents	Ethanol - partly soluble
Surface tension	25.2 mN/m at 23 °C (73 °F)
Dissociation constant	1.31 at 20 °C (68 °F)

## SECTION 10: Stability & Reactivity

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Oxidizing agents

**Hazardous decomposition products**

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Sodium oxides

In the event of fire: see section 5

**SECTION 11: Toxicological Information****Information on toxicological effects****Acute toxicity**

LD50 Oral - Rat - male and female - 1,200 mg/kg

LC50 Inhalation - Rat - 1 h - > 3,900 mg/m<sup>3</sup>

No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: Skin irritation - 24 h

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Risk of serious damage to eyes.

(OECD Test Guideline 405)

**Respiratory or skin sensitization**

Information given is based on data obtained from similar substances.

**Germ cell mutagenicity**

No data available

Ames test

S. typhimurium

Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: WT1050000

sneezing, the sodium salt of dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes, and passive smoking.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological Information

### Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) - 29 mg/l – 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic LC50 - Daphnia dubia (water flea) - 5.55 mg/l - 48 h

invertebrates NOEC - Daphnia dubia (water flea) - 0.684 mg/l - 7 d

Toxicity to algae Growth inhibition LOEC - Pseudokirchneriella subcapitata - 2.68 mg/l - 6 d  
static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - > 120 mg/l - 72 h

### Persistence and degradability

Biodegradability aerobic - Exposure time 28 d  
Result: 95 % - Readily biodegradable (OECD Test Guideline 301B)

Ratio BOD/ThBOD 95.9 %

### Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 72 h  
Bioconcentration factor (BCF): 3.9 - 5.3

### 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

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

## SECTION 13: Disposal Considerations

### Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product

## SECTION 14: Transport Information

### DOT (US)

UN number: 1325 Class: 4.1 Packing group: III  
Proper shipping name: Flammable solids, organic, n.o.s. (Sodium dodecyl sulphate)  
Reportable Quantity (RQ):  
Poison Inhalation Hazard: No

### IMDG

UN number: 1325 Class: 4.1 Packing group: III EMS-No: F-A, S-G  
Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium dodecyl sulphate)

### IATA

UN number: 1325 Class: 4.1 Packing group: III  
Proper shipping name: Flammable solid, organic, n.o.s. (Sodium dodecyl sulphate)

## SECTION 15: Regulatory Information

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Sodium dodecyl sulphate	CAS-No. 151-21-3	Revision Date
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**New Jersey Right to Know Components**

Sodium dodecyl sulphate	CAS-No. 151-21-3	Revision Date
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**California Prop. 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

<b>SECTION 16: Other Information</b>
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**Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Dam.	Serious eye damage
Flam. Sol.	Flammable solids
H228	Flammable solid.
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

**HMIS Rating**

Health hazard:	2
Chronic Health Hazard:	
Flammability:	3
Physical Hazard	3

**NFPA Rating**

Health hazard:	2
Fire Hazard:	3
Reactivity Hazard:	3

**Disclaimer:**

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.