SAFETY DATA SHEET

1. Identification

Product Name: Sodium Lauryl Sulfate (NF/FCC)

Cat No.: S529-3; S529-500

CAS-No: 151-21-3

Synonyms: Sodium lauryl sulfate; SDS; Dodecyl Sodium Sulfate

Recommended Use: Laboratory chemicals.

Uses advised against: Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin Corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Combustible dust</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Label Elements

Signal Word: Danger

Hazard Statements
May form combustible dust concentrations in air
Harmful if swallowed
Causes skin irritation
Causes serious eye damage
Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Eyes
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 or doctor/physician

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage
Store in a well-ventilated place. Keep container tightly closed

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Harmful to aquatic life with long lasting effects

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>151-21-3</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

4. First-aid measures

General Advice
If symptoms persist, call a physician.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation
Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion
Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects
Causes severe eye damage.

Notes to Physician
Treat symptomatically

5. Fire-fighting measures
Sodium Lauryl Sulfate (NF/FCC)

Revision Date 17-Jan-2018

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

Unsuitable Extinguishing Media
No information available

Flash Point
> 150 °C / > 302 °F

Method -
No information available

Autoignition Temperature
250 °C / 482 °F

Explosion Limits

<table>
<thead>
<tr>
<th></th>
<th>Upper</th>
<th>Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Sensitivity to Mechanical Impact</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Specific Hazards Arising from the Chemical
Dust can form an explosive mixture in air. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Carbon monoxide (CO) Carbon dioxide (CO₂) Sulfur oxides Sodium oxides

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6. Accidental release measures

Personal Precautions
Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

Environmental Precautions
Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up
Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling
Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures
Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tightly fitting safety goggles.

Skin and body protection
Long sleeved clothing.
9. Physical and chemical properties

Physical State: Solid
Appearance: Off-white
Odor: Odorless
pH: 8.5-10 in 1% aqueous solution
Melting Point/Range: Not available
Boiling Point/Range: Not available
Flash Point: > 150 °C / > 302 °F
Evaporation Rate: Not applicable
Flammability (solid, gas): Not applicable
Flammability or explosive limits:
   Upper: No data available
   Lower: No data available
Vapor Pressure: Not available
Vapor Density: Not applicable
Specific Gravity: Not available
Bulk Density: > 400 g/l
Solubility: Soluble in water
Partition coefficient; n-octanol/water: No data available
Autoignition Temperature: 250 °C / 482 °F
Decomposition Temperature: No data available
Viscosity: Not available
Molecular Formula: C12H25NaO4S
Molecular Weight: 288.38

10. Stability and reactivity

Reactive Hazard: No
Stability: Hygroscopic.
Conditions to Avoid: Excess heat. Incompatible products. Avoid dust formation. Exposure to moist air or water.
Incompatible Materials: Strong oxidizing agents, Strong acids, Strong bases
Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides, Sodium oxides
Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information
Oral LD50: Category 4. ATE = 300 - 2000 mg/kg.
Dermal LD50: Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Mist LC50: Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>1288 mg/kg ( Rat )</td>
<td>&gt;2000 mg/kg ( Rabbit )</td>
<td>LC50 &gt; 3900 mg/m³ ( Rat ) 1 h</td>
</tr>
</tbody>
</table>
Sodium Lauryl Sulfate (NF/FCC)

Toxicologically Synergistic Products
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation
Irritating to eyes and skin

Sensitization
No information available

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>151-21-3</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects
No information available

Reproductive Effects
No information available.

Developmental Effects
No information available.

Teratogenicity
No information available.

STOT - single exposure
None known

STOT - repeated exposure
None known

Aspiration hazard
No information available

Symptoms / effects, both acute and delayed
No information available

Endocrine Disruptor Information
No information available

Other Adverse Effects
The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
The product contains following substances which are hazardous for the environment. Contains a substance which is: Toxic to aquatic organisms.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>EC50: 53 mg/L, 72h (Desmodesmus subspicatus)</td>
<td>LC50: 4.2 - 4.8 mg/L, 96h flow-through (Lepomis macrochirus)</td>
<td>Not listed</td>
<td>EC50: 1.8 mg/L, 48h (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td>EC50: 30 - 100 mg/L, 96h (Desmodesmus subspicatus)</td>
<td>LC50: 4.5 mg/L, 96h (Lepomis macrochirus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50: 117 mg/L, 96h (Pseudokirchneriella subcapitata)</td>
<td>LC50: 5.8 - 7.5 mg/L, 96h static (Pimephales promelas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50: 3.59 - 15.6 mg/L, 96h static (Pseudokirchneriella subcapitata)</td>
<td>LC50: 10.2 - 22.5 mg/L, 96h semi-static (Pimephales promelas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50: 6.2 - 9.6 mg/L, 96h (Pimephales promelas)</td>
<td>LC50: 10.8 - 16.6 mg/L, 96h static (Poecilia reticulata)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50: 13.5 - 18.3 mg/L, 96h semi-static (Poecilia reticulata)</td>
<td>LC50: 1.31 mg/L, 96h semi-static (Cyprinus carpio)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50: 4.06 - 5.75 mg/L, 96h static (Lepomis macrochirus)</td>
<td>LC50: 8 - 12.5 mg/L, 96h static (Pimephales</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sodium Lauryl Sulfate (NF/FCC)

### LC50
- Promelas (Pimephales promelas)
  - LC50: 15 - 18.9 mg/L, 96h static
- Promelas (Pimephales promelas)
  - LC50: 22.1 - 22.8 mg/L, 96h static
- Promelas (Pimephales promelas)
  - LC50: 4.3 - 8.5 mg/L, 96h static
- Oncorhynchus mykiss
  - LC50: = 4.62 mg/L, 96h flow-through
- Oncorhynchus mykiss
  - LC50: = 4.2 mg/L, 96h flow-through (Brachydanio rerio)
- Oncorhynchus mykiss
  - LC50: = 7.97 mg/L, 96h semi-static (Brachydanio rerio)
- Oncorhynchus mykiss
  - LC50: = 4.6 mg/L, 96h semi-static
- Brachydanio rerio
  - LC50: 9.9 - 20.1 mg/L, 96h semi-static

### Persistence and Degradability
Persistence is unlikely

### Bioaccumulation/Accumulation
No information available.

### Mobility
Will likely be mobile in the environment due to its water solubility.

### Component log Pow

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>1.6</td>
</tr>
</tbody>
</table>

### 13. Disposal considerations
**Waste Disposal Methods**
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information
**DOT**
Not regulated

**TDG**
Not regulated

**IATA**
Not regulated

**IMDG/IMO**
Not regulated

### 15. Regulatory information
All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>X</td>
<td>X</td>
<td></td>
<td>205-788-1</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **X** - Listed
- **E** - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- **F** - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- **N** - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- **P** - Indicates a commenced PMN substance
- **R** - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- **S** - Indicates a substance that is identified in a proposed or final Significant New Use Rule
- **T** - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- **XU** - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
- **Y1** - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable
SARA 313 Not applicable
SARA 311/312 Hazard Categories See section 2 for more information
CWA (Clean Water Act) Not applicable
Clean Air Act Not applicable
OSHA Occupational Safety and Health Administration Not applicable
CERCLA Not applicable
California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

16. Other information

Prepared By Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 24-Nov-2010
Revision Date 17-Jan-2018
Print Date 17-Jan-2018
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of SDS