Material Safety Data Sheet
Dodecyl sulfate sodium salt

ACC# 08485

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Dodecyl sulfate sodium salt

**Catalog Numbers:** AC226140000, AC226141000, AC226145000, AC230420000, AC230420025, AC230420100, AC230420250, AC327310000, AC327311000, AC327315000, AC419530000, 23042-1000, 23042-5000, 41953-0010, 41953-0250, 41953-1000, BP166-100, BP166-5, BP166-500, NC9296329, NC9681121, O2674-25, S529-3, S529-500

**Synonyms:** SDS; Sodium lauryl sulfate; Dodecyl sodium sulfate.

**Company Identification:**
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

*For information, call:* 201-796-7100

*Emergency Number:* 201-796-7100

*For CHEMTREC assistance, call:* 800-424-9300

*For International CHEMTREC assistance, call:* 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>151-21-3</td>
<td>Sodium lauryl sulfate</td>
<td>85-100</td>
<td>205-788-1</td>
</tr>
<tr>
<td>7757-82-6</td>
<td>Sodium sulfate</td>
<td>&lt;6.5</td>
<td>231-820-9</td>
</tr>
<tr>
<td>7647-14-5</td>
<td>Sodium chloride</td>
<td>&lt;1.5</td>
<td>231-598-3</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: pale yellow crystals.

**Danger!** Flammable solid. May cause allergic respiratory reaction. Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye, skin, and respiratory tract irritation.

**Target Organs:** Respiratory system, eyes, skin.

**Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. Harmful if absorbed through the skin. Sodium lauryl sulfate can produce allergic sensitivity reactions. May produce drying effect on skin. Sodium lauryl sulfate increases the permeability of the skin.

**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea and
vomiting.

**Inhalation:** Harmful if inhaled. Causes respiratory tract irritation. May cause allergic respiratory reaction. May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

**Chronic:** Prolonged or repeated eye contact may cause conjunctivitis. Repeated exposure may cause allergic respiratory reaction (asthma).

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**Section 4 - First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Flammable solid.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** > 100 deg C (> 212.00 deg F)

**Autoignition Temperature:** 248 deg C (478.40 deg F)

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 3; Instability: 0

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**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:** Minimize dust generation and accumulation. Use spark-proof tools and explosion proof
equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

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**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Sodium lauryl sulfate: No OSHA Vacated PELs are listed for this chemical. Sodium sulfate: No OSHA Vacated PELs are listed for this chemical. Sodium chloride: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** 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.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Crystals

**Appearance:** white - pale yellow

**Odor:** faint odor

**pH:** 8.5 - 10 (1% aq.sol.)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 206 deg C

**Decomposition Temperature:** Not available.

**Solubility:** 150 g/L (20°C)

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C12H25NaO4S

**Molecular Weight:** 288.38
Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, strong bases, mineral acids.

**Hazardous Decomposition Products:** Carbon monoxide, oxides of sulfur, carbon dioxide, sodium oxide.

**Hazardous Polymerization:** Will not occur.

Section 11 - Toxicological Information

**RTECS#:**

- CAS# 151-21-3: WT1050000
- CAS# 7757-82-6: WE1650000
- CAS# 7647-14-5: VZ4725000

**LD50/LC50:**

- **CAS# 151-21-3:**
  - Draize test, rabbit, eye: 100 mg/24H Moderate;
  - Draize test, rabbit, eye: 250 ug Mild;
  - Draize test, rabbit, eye: 2 mg;
  - Draize test, rabbit, eye: 10 mg Moderate;
  - Draize test, rabbit, skin: 50 mg/24H Severe;
  - Draize test, rabbit, skin: 25 mg/24H Moderate;
  - Draize test, rabbit, skin: 250 mg/24H Moderate;
  - Draize test, rabbit, skin: 10 mg/24H;
  - Inhalation, rat: LC50 = >3900 mg/m3/1H;
  - Oral, rat: LD50 = 1288 mg/kg;

- **CAS# 7757-82-6:**
  - Oral, mouse: LD50 = 5989 mg/kg;

- **CAS# 7647-14-5:**
  - Draize test, rabbit, eye: 100 mg Mild;
  - Draize test, rabbit, eye: 100 mg/24H Moderate;
  - Draize test, rabbit, eye: 10 mg Moderate;
  - Draize test, rabbit, skin: 50 mg/24H Mild;
  - Draize test, rabbit, skin: 500 mg/24H Mild;
  - Inhalation, rat: LC50 = >42 gm/m3/1H;
  - Oral, mouse: LD50 = 4 gm/kg;
  - Oral, rat: LD50 = 3000 mg/kg;
  - Skin, rabbit: LD50 = >10 gm/kg;

**Carcinogenicity:**

- **CAS# 151-21-3:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.
- **CAS# 7757-82-6:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7647-14-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** No information found  
**Neurotoxicity:** No information found  
**Other Studies:**

### Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.  
**Environmental:** No information available.  
**Physical:** No information available.  
**Other:** Do not empty into drains.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>FLAMMABLE SOLIDS, ORGANIC, N.O.S.</td>
<td>FLAMMABLE SOLIDS, ORGANIC, N.O.S.</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td>UN1325</td>
<td>UN1325</td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
<td>III</td>
<td>III</td>
</tr>
</tbody>
</table>

### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**  
CAS# 151-21-3 is listed on the TSCA inventory.  
CAS# 7757-82-6 is listed on the TSCA inventory.  
CAS# 7647-14-5 is listed on the TSCA inventory.  

**Health & Safety Reporting List**  
None of the chemicals are on the Health & Safety Reporting List.  

**Chemical Test Rules**
None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**
None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**SARA Codes**
- CAS # 151-21-3: immediate.
- CAS # 7647-14-5: immediate.

**Section 313**
No chemicals are reportable under Section 313.

**Clean Air Act:**
- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depletors.
- This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
- None of the chemicals in this product are listed as Hazardous Substances under the CWA.
- None of the chemicals in this product are listed as Priority Pollutants under the CWA.
- None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
- CAS# 151-21-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
- CAS# 7757-82-6 can be found on the following state right to know lists: Pennsylvania, Massachusetts.
- CAS# 7647-14-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
- XN F

**Risk Phrases:**
- R 11 Highly flammable.
- R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**
- S 16 Keep away from sources of ignition - No smoking.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**WGK (Water Danger/Protection)**
- CAS# 151-21-3: 2
- CAS# 7757-82-6: 0
- CAS# 7647-14-5: 0
Canada - DSL/NDSL
CAS# 151-21-3 is listed on Canada's DSL List.
CAS# 7757-82-6 is listed on Canada's DSL List.
CAS# 7647-14-5 is listed on Canada's DSL List.

Canada - WHMIS
This product has a WHMIS classification of D2B, B4.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List
CAS# 151-21-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 2/04/1998
Revision #10 Date: 8/04/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.