SAFETY DATA SHEET

1. Identification

**Product identifier:** SODIUM DODECYL SULFATE

**Other means of identification**
**Product No.:** 1894, 4095, L050

**Recommended use and restriction on use**
- **Recommended use:** Not available.
- **Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

**Manufacturer**
- **Company Name:** Avantor Performance Materials, Inc.
- **Address:** 3477 Corporate Parkway, Suite 200
  Center Valley, PA 18034
- **Telephone:** Customer Service: 855-282-6867
- **Fax:**
- **Contact Person:** Environmental Health & Safety
- **e-mail:** info@avantormaterials.com

**Emergency telephone number:**
- **24 Hour Emergency:** 908-859-2151
- **Chemtrec:** 800-424-9300

2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**
- Flammable solid: Category 2

**Health Hazards**
- Acute toxicity (Oral): Category 4
- Acute toxicity (Dermal): Category 3
- Skin Corrosion/Irritation: Category 2
- Serious Eye Damage/Eye Irritation: Category 2A
- Specific Target Organ Toxicity - Single Exposure: Category 3

**OSHA hazard(s)**
- Combustible dust

**Environmental Hazards**
- Acute hazards to the aquatic environment: Category 1
- Chronic hazards to the aquatic environment: Category 1

**Label Elements**
- **Hazard Symbol:**
Signal Word: Danger

Hazard Statement: Flammable solid. Harmful if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

Precautionary Statement

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. Collect spillage.

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

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Substances

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM DODECYL SULPHATE</td>
<td></td>
<td>151-21-3</td>
<td>90 - 100%</td>
</tr>
</tbody>
</table>

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures
General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Ingestion: Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin Contact: Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. In case of irritation from airborne exposure, move to fresh air. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Symptoms: Harmful if swallowed. Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed. Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Dust may form explosive mixture with air.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Flammable solid. Dust clouds may be explosive under certain conditions.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust.

Methods and material for containment and cleaning up: Eliminate sources of ignition. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid generation and spreading of dust. Dust clouds may be explosive under certain conditions. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Avoid inhalation of dust. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, well-ventilated place. Eliminate sources of ignition. Protect against direct sunlight.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits
None of the components have assigned exposure limits.

Appropriate Engineering Controls
No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection
Hand Protection: Chemical resistant gloves

Other: Wear suitable protective clothing and gloves.

Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Provide eyewash station and safety shower. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using the product.

9. Physical and chemical properties
Appearance

Physical state: Solid
Form: powder
Color: White or cream
Odor: Faint
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: 204 °C
Initial boiling point and boiling range: No data available.
Flash Point: 170 °C
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.

Vapor pressure: < 0.01 kPa (20 °C)
Vapor density: No data available.
Relative density: 0.40 (20 °C)
Solubility(ies)
Solubility in water: 100 g/l
Solubility (other): No data available.
Partition coefficient (n-octanol/water): 1.60
Auto-ignition temperature: 310 °C
Decomposition temperature: No data available.
Viscosity: No data available.

Other information
Molecular weight: 288.38 g/mol (C12H26O4S.Na)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.
Chemical Stability: Material is stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur.
Conditions to Avoid: Heat, sparks, flames. Avoid dust close to ignition sources.
Hazardous Decomposition Products: Thermal decomposition may produce oxides of carbon and sulfur.

11. Toxicological information

Information on likely routes of exposure

Ingestion: Harmful if swallowed.
Inhalation: Dust may irritate throat and respiratory system and cause coughing.
Skin Contact: Toxic in contact with skin. Causes skin irritation.
Eye contact: Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: LD 50 (Rat, Male): 1,400 mg/kg
         LD 50 (Rat, Female): 977 mg/kg

Dermal
Product: LD 50 (Rabbit): 580 mg/kg

Inhalation
Product: LC 50 (Rat, 1 h): > 3.9 mg/l

Repeated Dose Toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: May cause skin irritation.

Serious Eye Damage/Eye Irritation
Product: Causes serious eye irritation.

Respiratory or Skin Sensitization
Product: May cause allergic skin disorders in sensitive individuals.

Carcinogenicity
Product: This substance has no evidence of carcinogenic properties.

   IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
   No carcinogenic components identified

   US. National Toxicology Program (NTP) Report on Carcinogens:
   No carcinogenic components identified

   No carcinogenic components identified

Germ Cell Mutagenicity

   In vitro
   Product: No mutagenic components identified

   In vivo
   Product: No mutagenic components identified

Reproductive Toxicity
Product: No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure
Product: Respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure
Product: None known.

Aspiration Hazard
Product: Not classified

Other Effects: None known.
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: LC 50 (Carp, hawk fish (Cirrhinus mrigala), 96 h): 0.59 mg/l Mortality

Aquatic Invertebrates
Product: LC 50 (Water flea (Daphnia magna), 48 h): 7.1 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: EC 50 (Green algae (Selenastrum capricornutum), 48 h): 706 - 5,918 mg/l Mortality

Persistence and Degradability

Biodegradation
Product: Expected to be readily biodegradable.

BOD/COD Ratio
Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)
Product: No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)
Product: Log Kow: 1.60

Mobility in Soil: No data available.

Other Adverse Effects: Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.
14. Transport information

DOT
UN Number: UN 2926
UN Proper Shipping Name: Flammable solids, toxic, organic, n.o.s. (SODIUM DODECYL SULFATE)
Transport Hazard Class(es)
Class(es): 4.1, 6.1
Label(s): 4.1, 6.1
Packing Group: II
Marine Pollutant: No

IMDG
UN Number: UN 2926
UN Proper Shipping Name: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (SODIUM DODECYL SULFATE)
Transport Hazard Class(es)
Class(es): 4.1, 6.1
Label(s): 4.1, 6.1
EmS No.: F-A, S-G
Packing Group: II
Marine Pollutant: No

IATA
UN Number: UN 2926
Proper Shipping Name: Flammable solid, toxic, organic, n.o.s. (SODIUM DODECYL SULFATE)
Transport Hazard Class(es):
Class(es): 4.1, 6.1
Label(s): 4.1, 6.1
Marine Pollutant: No
Packing Group: II

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4): None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- [x] Acute (Immediate)
- [ ] Chronic (Delayed)
- [x] Fire
- [ ] Reactive
- [ ] Pressure Generating

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification
None present or none present in regulated quantities.
SODIUM DODECYL SULPHATE

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

<table>
<thead>
<tr>
<th>Inventory Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS</td>
<td>On or in compliance with the inventory</td>
</tr>
<tr>
<td>Canada DSL Inventory List</td>
<td>On or in compliance with the inventory</td>
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<tr>
<td>EINECS, ELINCS or NLP</td>
<td>On or in compliance with the inventory</td>
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<tr>
<td>Japan (ENCS) List</td>
<td>On or in compliance with the inventory</td>
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<tr>
<td>China Inv. Existing Chemical Substances:</td>
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<tr>
<td>Korea Existing Chemicals Inv. (KECI):</td>
<td>On or in compliance with the inventory</td>
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<tr>
<td>Canada NDSL Inventory</td>
<td>Not in compliance with the inventory</td>
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<td>Philippines PICCS</td>
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<tr>
<td>US TSCA Inventory</td>
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<tr>
<td>Japan ISHL Listing</td>
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<tr>
<td>Japan Pharmacopoeia Listing</td>
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</tbody>
</table>

16. Other information, including date of preparation or last revision

NFPA Hazard ID

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe
Issue Date: 12-02-2014
Revision Date: No data available.
Version #: 1.1
Further Information: No data available.

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