

MSDS Number: **S3670** \* \* \* \* \* Effective Date: **02/01/07** \* \* \* \* \* Supercedes: **05/20/04**

# MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-996-6666

Outside U.S. and Canada  
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

## SODIUM DODECYL SULFATE

### 1. Product Identification

**Synonyms:** Sodium lauryl sulfate; Duponol; Dodecyl sodium sulfate; Sulfuric acid, monodecyl ester, sodium salt

**CAS No.:** 151-21-3

**Molecular Weight:** 288.38

**Chemical Formula:** C<sub>12</sub>H<sub>25</sub>OSO<sub>3</sub>Na

**Product Codes:**

J.T. Baker: 4095, L050

Mallinckrodt: 1894, 7718

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
Sodium Dodecyl Sulfate	151-21-3	90 - 100%
Yes		

### 3. Hazards Identification

**Emergency Overview**

**WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. FLAMMABLE SOLID.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

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Health Rating: 1 - Slight

Flammability Rating: 3 - Severe (Flammable)

Reactivity Rating: 1 - Slight

Contact Rating: 3 - Severe (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Red (Flammable)

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### **Potential Health Effects**

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#### **Inhalation:**

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. May cause allergic reaction in sensitive individuals.

#### **Ingestion:**

Large doses may cause gastrointestinal distress, nausea and diarrhea.

#### **Skin Contact:**

Mildly irritating to skin, causes dryness and a rash on continued exposure. May cause allergic skin reactions.

#### **Eye Contact:**

Causes irritation, redness, and pain.

#### **Chronic Exposure:**

Chronic exposure may cause skin effects.

#### **Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance.

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## **4. First Aid Measures**

#### **Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### **Ingestion:**

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

#### **Skin Contact:**

Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

#### **Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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## **5. Fire Fighting Measures**

#### **Fire:**

Flammable Solid!

Classified as a flammable solid according to DOT test methods.

**Explosion:**

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Fire Extinguishing Media:**

Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

Fine, white or slightly yellow powder.

**Odor:**

Slight fatty odor.

**Solubility:**

10g/100g water.

**Specific Gravity:**

0.4 @ 15C/4C

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

No information found.

**Melting Point:**

No information found.

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Oxides of carbon, sulfur and sodium oxide may form when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizers, acids.

**Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

## 11. Toxicological Information

**Toxicological Data:**

Oral rat LD50: 1288 mg/kg; Inhalation rat LC50: > 3900 mg/kg; irritation data: skin human, standard Draize, 25 mg/24-hour, mild; eye rabbit, standard Draize, 250 ug, mild. Investigated as a mutagen, reproductive effector.

**Reproductive Toxicity:**

Has caused mutagenic and teratogenic effects on laboratory animals.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Dodecyl Sulfate (151-21-3)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

96 Hr LC50 fathead minnow (fry): 10.2 mg/L;  
 96 Hr LC50 fathead minnow (juvenile):17 mg/L;  
 96 Hr LC50 fathead minnow (adult):22.5 mg/L;  
 96 Hr LC50 rainbow trout: 4.6 mg/L (Static).

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

**Domestic (Land, D.O.T.)**  
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**Proper Shipping Name:** FLAMMABLE SOLIDS, ORGANIC, N.O.S. (SODIUM LAUREL SULFATE)  
**Hazard Class:** 4.1  
**UN/NA:** UN1325  
**Packing Group:** III  
**Information reported for product/size:** 12KG

**International (Water, I.M.O.)**  
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**Proper Shipping Name:** FLAMMABLE SOLIDS, ORGANIC, N.O.S. (SODIUM LAUREL SULFATE)  
**Hazard Class:** 4.1  
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**Information reported for product/size:** 12KG

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----  
 Ingredient TSCA EC Japan Australia  
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Sodium Dodecyl Sulfate (151-21-3) Yes Yes Yes

Yes

-----\Chemical Inventory Status - Part 2\-----  
 ----- --Canada--

Ingredient	Korea	DSL	NDSL	Phil.
Sodium Dodecyl Sulfate (151-21-3)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Sodium Dodecyl Sulfate (151-21-3)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	-RCRA-		-TSCA-
	CERCLA	261.33	8(d)
Sodium Dodecyl Sulfate (151-21-3)	No	No	No

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: No  
SARA 311/312: Acute: Yes      Chronic: Yes      Fire: Yes      Pressure: No  
Reactivity: No      (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 2 Reactivity: 0

**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. FLAMMABLE SOLID.

**Label Precautions:**

Do not breathe dust.  
Avoid contact with eyes, skin and clothing.  
Wash thoroughly after handling.  
Use only with adequate ventilation.  
Keep container closed.  
Keep away from heat, sparks and flame.

**Label First Aid:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of skin contact, immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 3, 5, 10, 12, 14, 16.

**Disclaimer:**

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