

# **MATERIAL SAFETY DATA SHEET**

STEARIC ACID  
CAROLINA BIOLOGICAL

Revised: 09/12/07  
Replaces: 07/16/04  
Printed: 05/20/08

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## **1. PRODUCT DESCRIPTION**

Product Name: Stearic Acid  
Product Code(s): 89-2600  
Size: 500 g  
Chemical Name: Stearic Acid  
CAS Number: See section 2  
Formula: C18H36O2  
Synonyms: Octadecanoic Acid; 1-Heptadecanecarboxylic Acid  
Distributor: Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)  
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

## **2. COMPOSITION/INFORMATION ON INGREDIENTS**

Principal Hazardous Components: Stearic Acid(cas#57-11-4)90-100%  
TLV and PEL units: None established

## **3. HAZARD IDENTIFICATION**

Emergency Overview: May cause irritation. Avoid contact with eyes, skin, clothing. Avoid breathing dust. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

## **4. FIRST AID MEASURES**

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.  
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water.

Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

## **5. FIREFIGHTING PROCEDURES**

Flash Point(Method Used): 196 C (385 F)

NFPA Rating: Health: 1  
Fire: 1  
Reactivity: 0

Extinguisher Media:

Use dry chemical, CO2 or appropriate foam.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

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Unusual Fire and Explosion Hazards: Dust may form explosive mixture with air.

### **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

### **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Keep container tightly closed. Suitable for any general chemical storage area.

Other Precautions: Store in a cool, well-ventilated area from sources of heat, flame, or ignition.

### **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation.

NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust:	Yes
Mechanical(General):	Yes
Special:	No
Other:	No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

### **9. PHYSICAL DATA**

Molecular Weight:	284.49
Melting Point:	69 C (156 F)
Boiling Point:	383 C (721 F)
Vapor Pressure:	1 mmHg at 173.7 C
Vapor Density(Air=1):	9.8
Specific Gravity(H2O=1):	0.87
Percent Volatile by Volume:	0 (21 C)
Evaporation Rate(H2O=1):	N/A
Solubility in Water:	Negligible
Appearance and Odor:	White to light yellow solid, Tallow-like odor

### **10. REACTIVITY DATA**

Stability: Stable

Conditions to Avoid: Heat, flame, other sources of ignition, dusting

Incompatibility(Materials to Avoid): Strong bases, strong oxidizing agents

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

Toxicity Data: intravenous mouse LD50: 23 mg/kg; intravenous rat LD50: 21.5 mg/kg

Effects of Overexposure:

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Acute: See section 3  
Chronic: None

Conditions Aggravated by Overexposure: Irritation of upper respiratory tract, eyes.

Target Organs: Respiratory tract, eyes

Primary Route(s) of Entry: Inhalation, eye contact

## 12. ECOLOGICAL DATA

EPA Waste Numbers: None

## 13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

## 14. TRANSPORT INFORMATION

Non-regulated

## 15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS	SARA Sec. 313		CERCLA	RCRA
	Sec. 302 TPQ	Name List	Chemical Category	Sec. 103 RQ lbs.	Sec. 261.33
Stearic Acid	No	No	No	No	No

## 16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

### Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

NTP.....National Toxicology Program

OSHA.....Occupational Safety and Health Administration

PEL.....Permissible Exposure Limit

ppm.....parts per million

RCRA.....Resource Conservation and Recovery Act

SARA.....Superfund Amendments and Reauthorization Act

TLV.....Threshold Limit Value

TSCA.....Toxic Substances Control Act