



Material Safety Data Sheet

Revision Date 13-Feb-2013

Revision Number 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Stearic acid

Cat No. AC174490000; AC174490010; AC174490025; AC174490100

Synonyms Octadecanoic acid

Recommended Use Laboratory chemicals

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

Entity / Business Name
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number
For information in the US, call: 001-800-
ACROS-01
For information in Europe, call: +32 14 57 52
11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-
424-9300
CHEMTREC Phone Number, Europe: 001-
703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable solid. Irritating to eyes, respiratory system and skin. Contains a known or suspected mutagen. May be harmful by inhalation, in contact with skin and if swallowed.

Appearance White

Physical State Solid

Odor fatty odor

Target Organs Eyes, Skin, Respiratory system

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes	Irritating to eyes.
Skin	Irritating to skin. May be harmful in contact with skin.
Inhalation	Irritating to respiratory system. May be harmful if inhaled.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Chronic Effects Mutagenic effects have occurred in humans..

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Stearic acid	57-11-4	97

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.
Inhalation	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.
Ingestion	Do not induce vomiting. Clean mouth with water. Get medical attention.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	196°C / 384.8°F
Method -	No information available.
Autoignition Temperature	395°C / 743°F
Explosion Limits	
Upper	No data available
Lower	No data available
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Dry chemical. chemical foam.
Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.
Specific Hazards Arising from the Chemical	
Combustible material. Fine dust dispersed in air may ignite.	

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 **Health** 2 **Flammability** 2 **Instability** 0 **Physical hazards** N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation
Environmental Precautions	Should not be released into the environment
Methods for Containment and Clean Up	Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof equipment. Use only non-sparking tools. Avoid dust formation.
Storage	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep away from oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures	Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: *Immediately Dangerous to Life or Health*

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

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White
Odor	fatty odor
Odor Threshold	No information available.
pH	No information available.
Vapor Pressure	1 mmHg @ 174 °C
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	361°C / 681.8°F @ 760 mmHg
Melting Point/Range	67 - 69°C / 152.6 - 156.2°F
Decomposition temperature	No information available.
Flash Point	196°C / 384.8°F

9. PHYSICAL AND CHEMICAL PROPERTIES

Evaporation Rate	No information available.
Specific Gravity	0.840
Solubility	No information available.
log Pow	No data available
Molecular Weight	284.47
Molecular Formula	C18 H36 O2

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Incompatible products. Avoid dust formation.
Incompatible Materials	Combustible material, Bases, Strong oxidizing agents, Reducing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	No acute toxicity information is available for this product
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Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Stearic acid	Not listed	5 g/kg (Rabbit)	Not listed

Irritation	Irritating to eyes, respiratory system and skin
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Toxicologically Synergistic Products	No information available.
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Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
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Sensitization	No information available.
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Mutagenic Effects	Mutagenic effects have occurred in humans.
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Reproductive Effects	No information available.
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Developmental Effects	No information available.
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Teratogenicity	No information available.
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Other Adverse Effects	The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information.
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Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available

Mobility No information available

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

UN-No	UN1325
Proper Shipping Name	FLAMMABLE SOLIDS, ORGANIC, N.O.S.
Hazard Class	4.1
Packing Group	III

TDG

UN-No	UN1325
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.
Hazard Class	4.1
Packing Group	III

IATA

UN-No	1325
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.*
Hazard Class	4.1
Packing Group	III

IMDG/IMO

UN-No	1325
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.
Hazard Class	4.1
Packing Group	III

15. REGULATORY INFORMATION

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International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Stearic acid	X	X	-	200-313-4	-		X	X	X	X	X

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 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Not applicable

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Not applicable

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

No information available

Canada

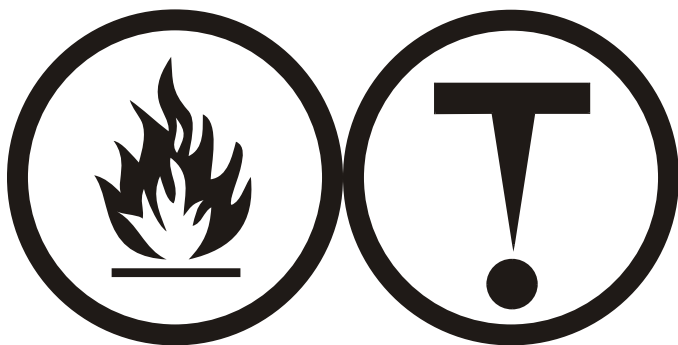
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B4 Flammable solid

D2A Very toxic materials

D2B Toxic materials

**16. OTHER INFORMATION****Prepared By**

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

Print Date

13-Feb-2013

Revision Summary

"****", and red text indicates revision

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS