



# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

### STEARIC ACID

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: July 2011

Synonyms: N-Octadecanoic Acid, Tri Star

CAS #: 57-11-4

DOT Hazard Class: Not Regulated

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Palmitic Acid 48% min; Stearic Acid 48% min;  
Lauric Acid .5% max; Myristic Acid .5% max; Eicosanoic Acid 1% max

#### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** A white to off-white waxy, fine powder having a slight characteristic odor. The powder or dust may cause slight to moderate eye, skin, and respiratory tract irritation. In high concentrations, with a source of ignition, a dust cloud may create a fire or explosion hazard.

**POTENTIAL HEALTH EFFECTS:**

**Eyes:** Exposure to the powder or dust may cause slight to moderate eye irritation. Symptoms of exposure may include tearing, redness, possible swelling and a stinging sensation. This product is not expected to cause corneal damage or impairment of vision.

**Skin:** Exposure to the powder or dust may cause slight skin irritation. Symptoms of exposure may include redness and a possible itching sensation. There is no published data indicating this product or its compounds can be absorbed through the skin.

**Inhalation:** Inhalation of dusts may cause slight to moderate irritation to the nose, mouth, throat, mucous membranes and lungs. Symptoms of exposure may include sneezing, coughing, shortness of breath, and possible chest discomfort. Inhalation of high dust concentrations may cause impairment of lung function.

**Ingestion:** If a small amount is swallowed, this product is not expected to cause any symptoms. If a large amount is swallowed, this product may cause slight to moderate irritation to the entire gastrointestinal tract, including the stomach and intestines characterized by nausea, vomiting, abdominal discomfort and/or diarrhea.

**Chronic:** The chronic exposure effects of this product are expected to be the same as for acute exposure.

#### SECTION 4 - FIRST AID MEASURES

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

**Skin:** Immediately wash skin with soap and water for at least 15 minutes.

**Inhalation:** If inhaled and breathing is difficult, immediately move to fresh air. If symptoms persist, call a physician.

**Ingestion:** If large quantities of this material are swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**On All Of The Above:** Consult a physician if symptoms persist.

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## **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: 196 °C (385 °F)

General Hazard: This product is an organic waxy, fine powder. The Uniform Fire Code Health Hazard classification for this product is: irritant. When heated sufficiently, this product will burn. In high enough concentrations, dusts from this product can present a fire or explosion hazard.

Extinguishing Media: Water fog, CO<sub>2</sub>, Foam, Dry Chemicals. Use a water spray fog to cool the containers exposed to the heat of a fire.

Special Fire Fighting Procedures: Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turnout gear.

Hazardous Combustion Products: When heated to decomposition, it emits toxic carbon monoxide, carbon dioxide and dense, irritating smoke.

Auto Ignition Temperature: Not Applicable

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## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Land Spill:** Wearing recommended protective equipment and clothing, pick up the spilled material and place in appropriate containers for recovery, disposal or satellite accumulation. Flush the spill area with water; collect the rinsates for disposal or sewer, as appropriate.

**Water Spill:** Wear recommended protective equipment and clothing if contact with hazardous material can occur. Stop or divert water flow. Dike contaminated water and remove for disposal and/or treatment. As appropriate, notify all downstream users of possible contamination.

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## **SECTION 7 - HANDLING AND STORAGE**

Storage Temperature & Pressure: Ambient

Store this product in a cool, dry well-ventilated area away from incompatible materials and products. Protect eyes, skin and clothing from contact with this product. Wear recommended personnel protective equipment. Avoid inhaling this product's dust. Do not ingest this product. Keep the container tightly closed when not in use. Wash thorough with a soap and water after handling this product.

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## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**CONTROL MEASURES:** Use a local or general, mechanical exhaust ventilation system capable of maintaining dust emissions, in the work area, below levels that may cause irritation.

**RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved respirators.

**SKIN AND EYE PROTECTION:**

Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from dust.

**WORK, HYGIENIC PRACTICES:**

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

**EXPOSURE LIMITS:** None Established

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## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: 361.1 °C (682 °F)

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H2O=1): 0.839

Bulk Density: Loose: .17-.23g/cm<sup>3</sup> Tapped: .34 - .44g/cm<sup>3</sup>

Percent Volatile by Volume (%): Not Applicable

Melting Point: 55 °C (131 °F)

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Insoluble

pH: Not Applicable

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## **SECTION 10 - STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable under normal temperatures and pressures. Avoid excessive heat (70 °C).

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** When heated to decomposition, it emits toxic oxides of carbon with dense, irritating smoke.

**KEEP AWAY FROM:** Excessive Heat (70° C); Oxidizers: strong, alkali and caustics.

This product is NOT sensitive to Mechanical Impact and is NOT sensitive to Static Discharge.

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## **SECTION 11 - TOXICOLOGICAL INFORMATION**

<b>Components</b>	<b>Stearic Acid</b>	<b>Palmitic Acid</b>
Skin contact	Rabbit: 500mg/24hrs; moderate	-
Oral Rat LD <sub>30</sub>	4,640 mg/kg	> 10gm/kg
Dermal Rabbit LC <sub>30</sub>	>5gm/kg	-
Dermal Human Data	Human: 75mg/3days; mild	Human: 75mg/3 days; Mild
Other Data	Intravenous Mouse LD <sub>50</sub> : 23mg/kg	IV Mouse: LD <sub>50</sub> : 57mg/kg
Carcinogenicity	Implant Mouse TD <sub>Lo</sub> : 400mg/kg; Equivocal Tumorigenic Agent by RTECS criteria; kidney, ureter & Bladder tumors	Implant Mouse:TD <sub>Lo</sub> : 1,000mg/kg Tumorigenic – Neoplastic by RTECS criteria; kidney, ureter & bladder tumors
Target Organs	Eyes & Skin	Eyes, Skin and Lungs
Medical Conditions	Skin disorders	Skin or respiratory disorders
Aggravated by Exposure		

## **SECTION 12 - ECOLOGICAL INFORMATION**

Environmental Fate: This product is lighter than water, almost insoluble in water and not expected to appreciably affect the pH of water. This product is subject to biodegradation.

Environmental Considerations: The aquatic toxicity for this product has not been determined.

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

RCRA 40 CFR 261 Classification: Non-Hazardous Waste.

US. EPA Waste Number: Not Applicable

Dispose of in accordance with all federal, state and local regulations.

## **SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME: Stearic Acid - Not Regulated

## **SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Not Listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance: Unlisted

Section 311/312 Hazard Category: Not Considered a Hazard

Section 313 Toxic Chemicals: Unlisted

Canadian Regulations:

Controlled Product: Yes

WHMIS Hazard Symbols: Material causing other toxic effects

WHMIS Class & Division: D.3B

Ingredient Information:

DSL Listed

IDL Substances: Stearic Acid & Myristic Acid

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## **SECTION 16 - OTHER INFORMATION**

NFPA Rating:	Extinguishing	2
	Health	1
	Flammability	1
	Reactivity	0

Reason for Issue: Changes to composition-Section 2.

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