

# Hydrogenated Castor Oil

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** Hydrogenated Castor Oil

**Synonyms:** Hydrogenated Castor Oil, HCO

**CAS No.:** 8001-78-3

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Thickener in lithium grease, emulsion in personal care applications

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Acme-Hardesty Co.

450 Sentry Parkway

Blue Bell, PA 19422

T 866-226-3834 T 215-591-3610

www.acme-hardesty.com

### 1.4. Emergency Telephone Number

**Emergency Number** : 800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Not classified

### 2.2. Label Elements

#### GHS-US Labeling

Not applicable

### 2.3. Other Hazards

No additional information available

### 2.4. Unknown Acute Toxicity (GHS-US):

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Name	Product Identifier	%	Classification (GHS-US)
Hydrogenated castor oil	(CAS No) 8001-78-3	100	Not classified

### 3.2. Mixtures

Not applicable

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting.

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### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Prolonged contact with large amounts of dust may cause mechanical irritation.

**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

**Symptoms/Injuries After Skin Contact:** Not irritating to skin.

**Symptoms/Injuries After Eye Contact:** Dust from this product may cause minor eye irritation.

**Symptoms/Injuries After Ingestion:** May cause nausea, vomiting, and diarrhea.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire. Carbon dioxide, dry chemical, foam, water spray, sand.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** May be combustible at high temperature.

**Explosion Hazard:** Risk of explosion by shock, friction, fire or other sources of ignition. Risk of explosion if heated under confinement.

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not allow product to spread into the environment. Avoid generating dust. Can be slippery on hard, smooth walking area.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Avoid generation of dust during clean-up of spills. Use a soft bristle brush or conductive rubber or conductive plastic shovel. Use caution, material is sensitive to initiation from sources such as heat, flame, shock, friction, or sparks. Use only non-sparking tools.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Use care during processing to minimize generation of dust.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Storage Temperature:** In bulk, store at about 5-10°C above melting point or at ambient temperature.

**Storage Area:** Temperature higher than necessary degrades quality at rates dependent on time and temperature of exposure.

**Special Rules on Packaging:** Stainless steel preferred for storage.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

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**Storage Temperature:** In bulk, store at about 5-10°C above melting point or at ambient temperature.

**Storage Area:** Temperature higher than necessary degrades quality at rates dependent on time and temperature of exposure.

**Special Rules on Packaging:** Stainless steel preferred for storage.

**7.3. Specific End Use(s)** Thickener in lithium grease, emulsion in personal care applications

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

### 8.2. Exposure Controls

**Appropriate Engineering Controls**

: Avoid dust production. Ground/bond container and receiving equipment.

**Personal Protective Equipment**

: Gloves. Protective goggles. Dust formation: dust mask.



**Hand Protection**

: Rubber gloves.

**Eye Protection**

: Chemical goggles or safety glasses.

**Respiratory Protection**

: When manufacturing or handling product in large quantities and dusts or particulates may be generated, maintain airborne concentrations below recommended limits. Workplace risk assessments should be completed before specifying and implementing respirator usage. NIOSH/MSHA approved respirators for protection should be used if respirators are found to be necessary.

**Other Information**

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

**Physical State**

: Solid

**Appearance**

: Flakes. White powder.

**Odor**

: Hardened vegetable oil.

**Odor Threshold**

: No data available

**pH**

: No data available

**Relative Evaporation Rate (butylacetate=1)**

: No data available

**Melting Point**

: 82 - 87 °C (179.6-188.6°F)

**Freezing Point**

: No data available

**Boiling Point**

: > 300 °C (572°F)

**Flash Point**

: > 310 °C (590°F)

**Auto-ignition Temperature**

: No data available

**Decomposition Temperature**

: No data available

**Flammability (solid, gas)**

: No data available

**Vapor Pressure**

: 3.81E-34 Pa at 20 °C.

**Relative Vapor Density at 20 °C**

: No data available

**Relative Density**

: ~ 99 @ 25 °C

**Specific Gravity**

: 0.93 g/cm<sup>3</sup> @25°C

**Solubility**

: Water: < 0.05 mg/l @20°C  
Ether: Soluble  
Organic solvent: Soluble

**Log Pow**

: No data available

**Log Kow**

: No data available

**Viscosity, Kinematic**

: No data available

**Viscosity, Dynamic**

: No data available

**Explosive Properties**

: No data available

**Oxidizing Properties**

: No data available

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**Explosive Limits** : Not applicable

**9.2. Other Information** No additional information available

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Stable at ambient temperature and under normal conditions of use

**10.2 Chemical Stability:** Risk of explosion by shock, friction, fire or other sources of ignition. Risk of explosion if heated under confinement.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Avoid creating or spreading dust. Avoid ignition sources.

**10.5 Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**10.6 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information On Toxicological Effects

**Acute Toxicity** : Not classified

Hydrogenated castor oil (8001-78-3)	
LD50 Oral Rat	> 10 g/kg

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

**Symptoms/Injuries After Skin Contact:** Not irritating to skin.

**Symptoms/Injuries After Eye Contact:** Dust from this product may cause minor eye irritation.

**Symptoms/Injuries After Ingestion:** May cause nausea, vomiting, and diarrhea.

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Hydrogenated castor oil (8001-78-3)	
LC50 Fish 1	> 10000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)

#### 12.2. Persistence and Degradability

Hydrogenated Castor Oil	
Persistence and Degradability	Readily biodegradable in water.

#### 12.3. Bioaccumulative Potential

Hydrogenated Castor Oil	
Bioaccumulative Potential	Not established.

**12.4. Mobility in Soil** No additional information available

#### 12.5. Other Adverse Effects

No additional information available

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

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## SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG

**14.1. UN Number** Not applicable

**14.2. UN Proper Shipping Name** Not regulated for transport.

**14.3. Additional Information**

**Other information** : No supplementary information available.

**Transport by Sea** Not regulated for transport.

**Air Transport** Not regulated for transport.

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

#### Hydrogenated castor oil (8001-78-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2 US State Regulations

#### Hydrogenated Castor Oil

##### State or local regulations

The product and/or its components does not appear on any state Right to Know lists.

## SECTION 16: OTHER INFORMATION

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

*The data herein are based on our current knowledge and believed to be reliable. Acme-Hardesty Co., provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.*

*Users must make their own determination that handling, storage, use and disposal of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product or container.*

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