



# Ricinoleic Acid

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 03/19/2015 Date of Issue: 03/19/2015 Supersedes: 03/29/2008

Version: 2.0

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

#### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** Ricinoleic Acid

**CAS No:** 141-22-0; 61789-44-4

**Synonyms:** [R-(Z)]-12-Hydroxy-9-Octadecenoic acid

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Industrial applications; metal working fluids; CASE (Coatings, Adhesives, Sealants, Elasticizers); cosmetics and viscosity modifier

#### 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

No labeling 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. Substance

Name : Ricinoleic Acid  
CAS No : 141-22-0; 61789-44-4

Name	Product Identifier	%	Classification (GHS-US)
Fatty acids, castor-oil	(CAS No) 61789-44-4	0.1 - 100	Not classified
9-Octadecenoic acid, 12-hydroxy-, (9Z,12R)-	(CAS No) 141-22-0	0.1 - 100	Not classified

#### 3.2. Mixture

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.

# Ricinoleic Acid

## Safety Data Sheet

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

**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.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms/Injuries:** None expected under normal conditions of use.

**Symptoms/Injuries After Inhalation:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Skin Contact:** None under normal conditions.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** If a large quantity has been ingested: 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:** Water spray or fog, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>). Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use water jet.

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

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**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. Treat as an oil or fat 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:** Handle in accordance with good industrial hygiene and safety practice.

#### 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.

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

**For Containment:** Absorb and/or contain spill with inert material, then place in suitable container.

**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

**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. Do not eat, drink or smoke when using this product.

### 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.

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

**7.3. Specific End Use(s) :** Industrial applications; metal working fluids; CASE (Coatings, Adhesives, Sealants, Elasticizers); cosmetics and viscosity modifier

# Ricinoleic Acid

## Safety Data Sheet

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

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

#### 8.2. Exposure Controls

##### Personal Protective Equipment

: Gloves. Safety glasses.



##### Hand Protection

: Wear chemically resistant protective gloves. The breakthrough time of the selected gloves must be greater than the intended use period.

##### Eye Protection

: Chemical goggles or safety glasses.

##### Respiratory Protection

: In case of inadequate ventilation wear respiratory protection.

##### 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	: Liquid
Appearance	: Yellow. Viscous.
Odor	: Characteristic of fatty acid
Odor Threshold	: No data available
pH	: No data available
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: No data available
Freezing Point	: 5.5 °C (41.90 °F)
Boiling Point	: 245 °C @ 100 mm Hg (473 °F)
Flash Point	: > 190 °C (374 °F)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor Pressure	: Not applicable
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 940 g/cm <sup>3</sup> @ 27.4°C
Solubility	: Water: Insoluble Organic solvent: Soluble in alcohol, acetone, ether, chloroform at room temperature
Partition Coefficient: N-Octanol/Water	: Not available
Log Kow	: -1.76
Viscosity	: 1.07 Poise @ 40°C
Explosive Properties	: No data available
Oxidizing Properties	: No data available
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:** Product is stable.

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

# Ricinoleic Acid

## Safety Data Sheet

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

- 10.4 Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5 Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Alkalis.
- 10.6 Hazardous Decomposition Products:** Under fire conditions this material may produce hazardous carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), various low molecular weight hydrocarbons, and smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity** : Not classified

**Ricinoleic Acid ( \f )141-22-0; 61789-44-4**

**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

**Ricinoleic Acid (141-22-0; 61789-44-4)**

**Reproductive Toxicity:** Not classified

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

**Ricinoleic Acid (141-22-0; 61789-44-4)**

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

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Skin Contact:** None under normal conditions.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** If a large quantity has been ingested: May cause nausea, vomiting, and diarrhea.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

### 12.2. Persistence and Degradability

**Ricinoleic Acid (141-22-0; 61789-44-4)**

**Persistence and Degradability** The substance is biodegradable. Unlikely to persist.

### 12.3. Bioaccumulative Potential

**Ricinoleic Acid (141-22-0; 61789-44-4)**

**Log Kow** -1.76

**Bioaccumulative Potential** Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

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

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## 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.

## SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

**14.1. UN Number** Not regulated for transport

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

### 14.3. Additional Information

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

# Ricinoleic Acid

## Safety Data Sheet

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

**Transport by Sea** Not regulated for transport

**Air Transport** Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### 15.1 US Federal Regulations

<b>9-Octadecenoic acid, 12-hydroxy-, (9Z,12R)- (141-22-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Fatty acids, castor-oil (61789-44-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	Y2 - 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.

**15.2 US State Regulations** Neither this product nor its chemical components appear on any US state lists.

### SECTION 16: OTHER INFORMATION

<b>Revision Date</b>	: 03/19/15
<b>Other Information</b>	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

*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.*

SDS US (GHS HazCom) - ACME Hardesty