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

1.1. Product Identifier
Product Form: Substance
Product Name: Dehydrated Castor Oil
CAS No: 64147-40-6
Synonyms: DCO, Castor oil, dehydrated

1.2. Intended Use of the Product

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castor oil, dehydrated</td>
<td>(CAS No) 64147-40-6</td>
<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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.
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: Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
Symptoms/Injuries After Inhalation: Inhalation of vapors may cause respiratory irritation.
Symptoms/Injuries After Skin Contact: Not irritating to skin.
Symptoms/Injuries After Eye Contact: The product is not considered to be irritating to the eyes.
Symptoms/Injuries After Ingestion: May cause nausea, vomiting, and diarrhea.
Chronic Symptoms: None known.

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, fog.
Unsuitable Extinguishing Media: Do not use water.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: May be combustible at high temperature.
Explosion Hazard: Product is not explosive.
Reactivity: Stable at ambient temperature and under normal conditions of use.

5.3. Advice for Firefighters
Precautionary Measures Fire: Do not breathe fumes from fires or vapors from decomposition.
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. Can be slippery on hard, smooth walking area.

6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).

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: Absorbent should be sprayed with water in order to prevent self ignition. WARNING: hot product adsorbed on porous material can burn spontaneously. Do not take up in combustible material such as saw dust or cellulosic material.

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.

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 oxidizers.
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)
Viscosity modifier in Sealants, Adhesives and Paints; Ingredient in Alkyd Resins Used in Anti-corrosive Coatings and Fast Drying Metal Primers and Topcoats.

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: Ensure all national/local regulations are observed.


Hand Protection: Rubber gloves.

Eye Protection: Chemical goggles or safety glasses.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow. Oily</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Evaporation Rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (ether=1)</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt; 300 °C (572°F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 285 °C (545°F) Pensky Martens Closed Cup</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.92 g/cm³ @ 25°C (77 °F)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Insoluble</td>
</tr>
<tr>
<td>Organic solvent: Soluble in most organic solvents at room temperature</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>200 cSt @ 25°C (77 °F)</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

9.2. Other Information: Vapors heavier than air. Evaporation slower than ether.

SECTION 10: STABILITY AND REACTIVITY

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

10.2 Chemical Stability: Stable at standard temperature and pressure.

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

10.4 Conditions to Avoid: Avoid ignition sources.

10.5 Incompatible Materials: Strong oxidizers.

10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Decomposes to produce corrosive fumes of acrolein.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified
Dehydrated Castor Oil
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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: Inhalation of vapors may cause respiratory irritation.
Symptoms/Injuries After Skin Contact: Not irritating to skin.
Symptoms/Injuries After Eye Contact: The product is not considered to be irritating to the eyes.
Symptoms/Injuries After Ingestion: May cause nausea, vomiting, and diarrhea.
Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity  No additional information available
12.2. Persistence and Degradability
Dehydrated Castor Oil (64147-40-6)
Persistence and Degradability: Readily biodegradable in water.
12.3. Bioaccumulative Potential
Dehydrated Castor Oil (64147-40-6)
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.

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.

Transport by Sea  Not regulated for transport
Air Transport  Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations
Castor oil, dehydrated (64147-40-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations
Dehydrated Castor Oil (64147-40-6)
State or local regulations: The product and/or its components does not appear on any state Right to Know lists.

SECTION 16: OTHER INFORMATION

Revision date: 10/06/2014
Other Information: 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.

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