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

1.1. Product Identifier
Product Form: Substance
Product Name: Sebacic Acid
CAS No: 111-20-6
Synonyms: Decanedioic Acid; 1,10-Decanedioic acid

1.2. Intended Use of the Product
Use of the substance/mixture: Industrial intermediate, corrosion inhibitor, thickener for lubricating greases

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
GHS-US classification
Comb. Dust
Full text of H-phrases: see section 16

2.2. Label Elements
GHS-US Labeling
Signal Word (GHS-US): Warning
Hazard Statements (GHS-US): May form combustible dust concentrations in air

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: Sebacic Acid
CAS No: 111-20-6

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decanedioic acid</td>
<td>(CAS No) 111-20-6</td>
<td>&gt; 99</td>
<td>Comb. Dust</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: Dust from this product may cause irritation to the respiratory tract.
Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Eye Contact: Eye contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
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: Alcohol foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Combustible Dust.
Explosion Hazard: Dust explosion hazard in air.
Reactivity: Hazardous reactions are not expected to occur under normal conditions.

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
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.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials.
Methods for Cleaning Up: Minimize generation of dust. Clean 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: Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation. Avoid dust production. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.
Hygiene Measures: Do not breathe dust. 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: Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Protect from moisture. Protect from sunlight. Store in a well-ventilated place. Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

7.3. Specific End Use(s)
Industrial intermediate, corrosion inhibitor, thickener for lubricating greases
**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), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

8.2. **Exposure Controls**

**Appropriate Engineering Controls**
- Avoid dust production. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

**Personal Protective Equipment**

**Hand Protection**
- protective gloves.

**Eye Protection**
- In case of dust production: protective goggles.

**Respiratory Protection**
- Dust mask.

**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>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White granules</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>&lt; 1</td>
</tr>
<tr>
<td>Melting Point</td>
<td>133 °C (271.4 °F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>295 °C (563 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>221 °C (429.8 °F)</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>&gt; 371 °C (699.8 °F)</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>1.207 @ 20°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Slight</td>
</tr>
<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>2.19</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</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>
<tr>
<td>Lower Flammable Limit</td>
<td>30 %</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Dust deflagration index</td>
<td>Kst 231 Bar-m/sec</td>
</tr>
</tbody>
</table>
9.2. Other Information  No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:  Hazardous reactions are not expected to occur under normal conditions.

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:  Direct sunlight. Extremely high or low temperatures. Sparks, heat, open flame and other sources of ignition.


10.6 Hazardous Decomposition Products:  Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity:  Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>Toxicity</th>
<th>Exposure Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebacic Acid (111-20-6)</td>
<td>LD50 Oral Rat</td>
<td>3400 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

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

Sebacic Acid (111-20-6)

Specific Target Organ Toxicity (Repeated Exposure):  Not classified

Reproductive Toxicity:  Not classified

Aspiration Hazard:  Not classified

Symptoms/Injuries After Inhalation:  Dust from this product may cause irritation to the respiratory tract.

Symptoms/Injuries After Skin Contact:  Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact:  Eye contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion:  Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms:  None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity  No additional information available

12.2. Persistence and Degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and Degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebacic Acid (111-20-6)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebacic Acid (111-20-6)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

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.
Sebacic Acid
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and 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
Decanedioic acid (111-20-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
EPA TSCA Regulatory Flag
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

Revision Date: 10/12/2015
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:

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>May form combustible dust concentrations in air</td>
<td></td>
</tr>
</tbody>
</table>

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.

ACME Hardesty US GHS SDS