SAFETY DATA SHEET: SORBIC ACID

1. IDENTIFICATION
Product Name: SORBIC ACID
Synonyms: 2,4-Hexadienoic acid
Formula and Formula Weight: C6H8O2  112.13
Integra numbers beginning with: S636.32
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION
OSHA Classification:

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazard Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Eye Damage/Irritation</td>
<td>2A</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity</td>
<td>3</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

Signal Word: WARNING

Precautionary Statements
Prevention:
- Avoid breathing dust, fume, gas, mist, vapors, spray.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wear eye protection, face protection. Wear protective gloves.

Response
- If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice, attention.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice, attention.
- Call a poison center, doctor if you feel unwell.
- Specific treatment (see first aid section on this label)
- Take off contaminated clothing and wash it before reuse.

Storage
- Store locked up in a well ventilated place. Keep container tightly closed.

Disposal
- Dispose of contents, container in accordance with all governmental regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbic acid</td>
<td>2,4-Hexadienoic acid</td>
<td>00110-44-1</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing.

Eye Contact: Flush eyes with plenty of water. Remove contact lenses, if present and easy to do. If irritation persists, seek medical attention.

Skin Contact: Remove contaminated clothing. Flush skin with plenty of water. Seek medical attention if irritation develops.

Ingestion: Do not induce vomiting. Rinse mouth. If adverse symptoms develop, seek medical attention.

Additional notes: Symptoms and effects include skin, eye, respiratory irritation.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, dry chemical, alcohol foam.

Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Specific Hazards: None identified

Hazardous combustion products: Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

OSHA SDS #: 26492 rev 101  3/27/2015  SORBIC ACID
7. HANDLING AND STORAGE


Storage and Handling: Store locked up in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed and protect them from physical damage.

- Avoid breathing dust, fume, gas, mist, vapors, spray.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wear eye protection, face protection. Wear protective gloves.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH Exposure Limits:

- Sorbic acid: None identified

Engineering Controls: Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.

Respiratory Protection: If use generates annoying or irritating dusts, mists or vapors, use a NIOSH approved respirator with a particulate filter.

Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure.

Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: White powder or granules
- Odor: Odorless
- Odor Threshold: Not available
- pH: 3.3
- Melting/Freezing Point: 132 °C
- Initial Boiling Point and Boiling Range: 172 °C
- Flash Point: 126 °C
- Evaporation Rate: Not available
- Flammability: Not flammable
- Flammable or Explosive Limits (% by volume in air)
  - Lower: Not available
  - Upper: Not available
- Vapor Pressure: 0.01 mm Hg @20°C
- Vapor Density: Not available
- Relative Density: 1.2 g/cc
- Solubility: 0.15% in water @20°C
- Partition Coefficient: n-octanol/water log Pow: 1.858
- Auto-Ignition Temperature: Not available
- Decomposition Temperature: 228
- Viscosity: Not available

10. STABILITY AND REACTIVITY

- Reactivity: No information available
- Stability: Stable
- Possibility of Hazardous Reactions: Hazardous polymerization will not occur
- Conditions to Avoid: Excessive dusting, especially in the presence of ignition sources. Light.
- Incompatibles: Incompatible with strong bases and strong oxidizers. Reducing agents.
- Decomposition Products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

- Effects of Over Exposure:
  - Inhalation: Inhalation may irritate the nose, throat and upper respiratory tract.
  - Skin Contact: Contact may cause skin irritation.
  - Eye Contact: Contact may be irritating to the eyes.
  - Ingestion: No information available
  - Chronic Effects: None identified
  - Target Organs: None identified
  - Additional Effects: None identified
  - Reproductive Effects: None identified
  - Carcinogenicity: None identified

- Toxicity Data:
  - LD50 (skin, rabbit): >7940 mg/kg

OSHA SDS #: 26492 rev 101 3/27/2015  SORBIC ACID  Page 2
12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Sorbic acid</th>
<th>Aquatic Toxicity Data: No information available</th>
<th>Terrestrial Toxicity Data: No information available</th>
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</thead>
<tbody>
<tr>
<td>Persistence and degradability: No information available</td>
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<tr>
<td>Bioaccumulative potential: No information available</td>
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<tr>
<td>Mobility in soil: No information available</td>
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<tr>
<td>Other adverse effects: No information available</td>
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13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION

This product is not a regulated material for domestic ground transportation.

   Environmental hazards: No information available
   Special precautions: No information available
   Bulk transport: No information available

15. REGULATORY INFORMATION

Sorbic acid is listed in the TSCA inventory.

16. OTHER INFORMATION

OSHA SDS #: 26492 rev 101 3/27/2015

NE = Not established, NA = Not applicable or Not available

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***** END OF SDS *****