Material Safety Data Sheet
Tartaric acid

Section 1 - Chemical Product and Company Identification

MSDS Name:
Tartaric acid
Catalog Numbers:
LC25940
Synonyms:
2,3-Dihydroosuccinic acid; 2,3-Dihydroxybutanedioic acid; L-(+)-Tartaric Acid; 1,2-Dihydroxyethane-1,2-dicarboxylic acid.
Company Identification:
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number:
(412) 826-5230
Emergency Phone Number:
(800) 424-9300
CHEMTREC Phone Number:
(800) 424-9300

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>87-69-4</td>
<td>Tartaric acid</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: White solid.
Caution! May cause eye, skin and respiratory tract irritation.
Target Organs: Eyes, skin and respiratory tract.

Potential Health Effects
Eye:
May cause eye irritation.
Skin:
May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion:
May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation:
May cause respiratory tract irritation. May be harmful if inhaled.
Chronic:
No information found.
Section 4 - First Aid Measures

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:
Call a poison control center. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

Extinguishing Media:
In case of fire, use water, dry chemical, chemical foam, or foam.

Autoignition Temperature:
425°C (797°F)

Flash Point:
210°C (410°F)

NFPA Rating:
(estimated) Health: 2; Flammability: 1; Instability: 0

Explosion Limits:
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Sweep up or absorb material, and then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.
Material Safety Data Sheet
Tartaric acid

Section 7 - Handling and Storage

Handling:
Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:
Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tartaric acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Tartaric acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective clothing to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>None reported</td>
</tr>
<tr>
<td>pH</td>
<td>1.6 (100 g/l H2O)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>168-170°C</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>&gt;170°C</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.76 (water=1) @ 20°C</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet
Tartaric acid

Molecular Formula: C4H6O6
Molecular Weight: 150.09

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials, dust generation.

Incompatibilities with Other Materials:
Fluorine, silver, metals, oxidizing agents, reducing agents, bases.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 87-69-4: WW7875000.

LD50/LC50:
Not available.

Carcinogenicity:
CAS# 87-69-4: Not listed by ACGIH, IARC, NTP, or California Proposition 65.

Epidemiology:
No information found

Teratogenicity:
No information found

Reproductive:
No information found

Mutagenicity:
No information found

Neurotoxicity:
No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.
Material Safety Data Sheet
Tartaric acid

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class: 
UN Number: 
Packing Group: 

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 87-69-4 is listed on the TSCA Inventory.
SARA Reportable Quantities (RQ):
None of the chemicals in this material have an RQ.
CERCLA/SARA Section 313:
No chemicals are reportable under Section 313.
OSHA - Highly Hazardous:
None of the chemicals in this product are considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 87-69-4 is not present on state lists from California, Pennsylvania, Minnesota, Massachusetts, Florida, or New Jersey.
California Regulations:
None.

European/International Regulations
Canadian DSL/NDSL:
CAS# 87-69-4 is listed on Canada’s DSL List.
Canada Ingredient Disclosure List:
CAS# 87-69-4 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 12, 2007
Revision Date: December 10, 2007

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.