

DATE: 03/26/98 ACCT: 742982001
INDEX: N/A CAT NO: A315500 PO NBR: N/A

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**** MATERIAL SAFETY DATA SHEET ****

L-(-)-Tartaric Acid
22460

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: L-(-)-Tartaric Acid

Catalog Numbers:

S80216, A313-12, A313-212, A313-500, A313212, A313500, A314 3, A314 500,
A314-3, A314-500, A3143, A314500, A315 500, A315-500, A315500

Synonyms:

2,3-Dihydroxysuccinic acid; 2,3-Dihydroxymutandilic acid; Thraeric
acid; L-(-)-Tartaric acid

Company Identification: Fisher Scientific

1 Reagent Lane
Fairview, NJ 07410

For information, call: 201-796-7900

Emergency Number: 201-796-7900

For CHEMREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS #	Chemical Name	%	INECS #
87-69-4	Tartaric acid	100	201-766-0

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white.
Caution! Causes eye and skin irritation. Causes digestive and
respiratory tract irritation.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: Dust may cause mechanical irritation. Low hazard for usual
industrial handling.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and
diarrhea.

Inhalation: Dust is irritating to the respiratory tract.

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 lids. If irritation
develops, get medical aid.

Skin:

Get medical aid if irritation develops or persists. Flush skin with
plenty of soap and water.

Ingestion:

If victim is conscious and alert, give 2-4 cups of milk or water.
Never give anything by mouth to an unconscious person. Get medical
aid if irritation or symptoms occur.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing,
give artificial respiration. If breathing is difficult, give oxygen.
Get medical aid if cough or other symptoms appear.

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.

Extinguishing Media:

Use water, dry chemical, chemical foam, or
alcohol-resistant foam.

Autoignition Temperature: 797 deg F (425.00 deg C)
Flash Point: 410 deg F (210.00 deg C)
NFPA Rating: health-0; flammability-1; reactivity-0

Explosion Limits: Lower: Not available.
Upper: Not available.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

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

Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry,
closed container for disposal. Avoid generating dusty conditions.

**** SECTION 7 - HANDLING AND STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and
wash before reuse. Use with adequate ventilation. Do not get on skin
or in eyes. Do not ingest or inhale.

Storage: Store in a cool, dry place. Store in a tightly closed container.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Good general ventilation should be sufficient to control airborne
levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tartaric acid	none listed	none listed	none listed

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.

Skin:

Wear appropriate protective gloves to prevent skin
exposure.

Clothing:

Wear appropriate protective clothing to prevent skin
exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR
1910.134. Always use a NIOSH-approved respirator when
necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:

Appearance: Solid
white
odorless

pH: Not available.

Vapor Pressure: Negligible.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 170-172 deg C

Freezing/Melting Point: 220 deg C

Decomposition Temperature: 220 deg C

Solubility: Soluble in water.

Specific Gravity/Density: 1.50 (20 deg C)

Refractive Index: 1.45

Molecular Weight: 150.0364

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials:
Silver, bases, oxidizing agents, reducing agents.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTCS#:

CAS# 87-69-4: WW7675000

LD50/LC50:
Not available.

Carcinogenicity:
Tartaric acid -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

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No data available.
Teratogenicity:
No data available.
Reproductive Effects:
No data available.
Neurotoxicity:
No data available.
Mutagenicity:
No data available.
Other Studies LDLo = 5 gm/kg.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Not available.
Environmental Fate:
Not available.
Physical/Chemical:
Not available.
Other:
Not available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants:
None listed.
RCRA D-Series Chronic Toxicity Reference Levels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: None listed.
Not listed as a material banned from land disposal according to RCRA.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
IMO No information available
IATA
No information available.
RID/ADR
No information available.
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA CAS# 87-69-4 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 87-69-4: acute.
Section 313
None of the chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
Tartaric acid is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level:

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None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available.
Risk Phrases:
Safety Phrases:
WGK (Water Danger/Protection)
CAS# 87-69-4: 0

CAS# 87-69-4 is listed on Canada's DSL/NDL List.
This product has a WHMIS classification of D2B.
CAS# 87-69-4 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 3/31/1995 Revision #4 Date: 12/12/1997

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Fisher has been advised of the possibility of such damages.