

## SAFETY DATA SHEET

Creation Date 03-November-2010

Revision Date 18-January-2018

Revision Number 4

### 1. Identification

**Product Name** L(+)-Tartaric acid

**Cat No. :** AC137850000; AC137850025; AC137850100; AC137855000

**CAS-No** 87-69-4  
**Synonyms** Natural tartaric acid; L(+)-Dihydroxysuccinic acid

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

##### **WHMIS 2015 Classification**

Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

**Serious Eye Damage/Eye Irritation**  
**Combustible Dusts**

Category 1  
Category 1

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

May form combustible dust concentrations in air

Causes serious eye damage

**Precautionary Statements****Prevention**

Keep container tightly closed

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Wear protective gloves/protective clothing/eye protection/face protection

**Response**

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER/doctor

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. Composition/Information on Ingredients

| Component            | CAS-No  | Weight % |
|----------------------|---------|----------|
| Tartaric acid (d, l) | 87-69-4 | >95      |

### 4. First-aid measures

|   |   |
|---|---|
| <b>General Advice</b>   | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>Skin Contact</b>   | Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.                    |
| <b>Inhalation</b>   | Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.                     |
| <b>Ingestion</b>  | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.           |
| <b>Most important symptoms/effects<br/>Notes to Physician</b> | Causes eye burns. Causes severe eye damage.<br>Treat symptomatically  |

### 5. Fire-fighting measures

|                                       |  |
|---------------------------------------|--|
| <b>Suitable Extinguishing Media</b>   | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| <b>Unsuitable Extinguishing Media</b> | No information available   |
| <b>Flash Point</b>                    | 210 °C / 410 °F  |
| <b>Method -</b>                       | No information available   |
| <b>Autoignition Temperature</b>       | 425 °C / 797 °F  |
| <b>Explosion Limits</b>               |  |

|   |                          |
|---|--------------------------|
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Dust can form an explosive mixture in air. Fine dust dispersed in air may ignite. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Thermal decomposition can lead to release of irritating gases and vapors

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 1                   | 0                  | N/A                     |

**6. Accidental release measures****Personal Precautions**

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up**

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

**7. Handling and storage****Handling**

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**8. Exposure controls / personal protection****Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

**Personal protective equipment****Eye Protection**

Goggles

**Hand Protection**

Protective gloves

| <b>Glove material</b> | <b>Breakthrough time</b> | <b>Glove thickness</b> | <b>Glove comments</b>  |
|-----------------------|--------------------------|------------------------|------------------------|
| Natural rubber        | See manufacturers        | -                      | Splash protection only |
| Butyl rubber          | recommendations          |                        |                        |
| Nitrile rubber        |                          |                        |                        |
| Neoprene              |                          |                        |                        |
| PVC                   |                          |                        |                        |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the

supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified 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.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

#### Environmental exposure controls

No information available.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|   |                                 |
|---|---------------------------------|
| <b>Physical State</b>                         | Solid                           |
| <b>Appearance</b>                             | White                           |
| <b>Odor</b>                                   | Odorless                        |
| <b>Odor Threshold</b>                         | No information available        |
| <b>pH</b>                                     | 1.6 1% aq. solution             |
| <b>Melting Point/Range</b>                    | 168 - 172 °C / 334.4 - 341.6 °F |
| <b>Boiling Point/Range</b>                    | No information available        |
| <b>Flash Point</b>                            | 210 °C / 410 °F                 |
| <b>Evaporation Rate</b>                       | Not applicable                  |
| <b>Flammability (solid,gas)</b>               | No information available        |
| <b>Flammability or explosive limits</b>       |                                 |
| <b>Upper</b>                                  | No data available               |
| <b>Lower</b>                                  | No data available               |
| <b>Vapor Pressure</b>                         | <0.1 mbar @ 20 °C               |
| <b>Vapor Density</b>                          | Not applicable                  |
| <b>Specific Gravity</b>                       | 1.76 @ 20°C                     |
| <b>Solubility</b>                             | Soluble in water                |
| <b>Partition coefficient; n-octanol/water</b> | No data available               |
| <b>Autoignition Temperature</b>               | 425 °C / 797 °F                 |
| <b>Decomposition Temperature</b>              | > 170°C                         |
| <b>Viscosity</b>                              | Not applicable                  |
| <b>Molecular Formula</b>                      | C4 H6 O6                        |
| <b>Molecular Weight</b>                       | 150.09                          |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | None known, based on information available  |
| <b>Stability</b>                        | Stable under normal conditions.   |
| <b>Conditions to Avoid</b>              | Avoid dust formation. Incompatible products. Excess heat.   |
| <b>Incompatible Materials</b>           | Bases, Fluorine, Metals, Reducing agents  |
| <b>Hazardous Decomposition Products</b> | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Thermal decomposition can lead to release of irritating gases and vapors |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

**Component Information**

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** Severe eye irritant

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component            | CAS-No  | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|----------------------|---------|------------|------------|------------|------------|------------|
| Tartaric acid (d, l) | 87-69-4 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

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| Component            | Freshwater Algae | Freshwater Fish | Microtox | Water Flea        |
|----------------------|------------------|-----------------|----------|-------------------|
| Tartaric acid (d, l) | -                | -               | -        | EC50=230 mg/L 48h |

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

| Component            | log Pow |
|----------------------|---------|
| Tartaric acid (d, l) | -1.7    |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

|                 |               |
|-----------------|---------------|
| <u>DOT</u>      | Not regulated |
| <u>TDG</u>      | Not regulated |
| <u>IATA</u>     | Not regulated |
| <u>IMDG/IMO</u> | Not regulated |

## 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

| Component            | DSL | NDSL | TSCA | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|----------------------|-----|------|------|-----------|--------|-----|-------|------|------|-------|------|
| Tartaric acid (d, l) | X   | -    | X    | 201-766-0 | -      |     | X     | X    | X    | X     | X    |

### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## 16. Other information

|                         |  |
|-------------------------|--|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com   |
| <b>Creation Date</b>    | 03-November-2010   |
| <b>Revision Date</b>    | 18-January-2018  |
| <b>Print Date</b>       | 18-January-2018  |
| <b>Revision Summary</b> | This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals. |

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**