

Material Safety Data Sheets (MSDS)

L-(+)-Tartaric Acid

Identification of Product

Chemical Code: CHE-T1

Chemical Name: L-(+)-Tartaric Acid

Chemical Grade: AR

Chemical Formula: $C_4H_6O_6$

Chemical Weight: 150,09 g/mol

CAS No: 87-69-4

Chemical Synonyms: L-Tartaric Acid,
Dextrotartaric Acid.

Hazards Identification

REACH No: No Data Available

Signal Word: Danger

Supplemental Hazard Information:

Additional Hazard Information: This substance contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.



Hazards statements

H318 - Causes serious eye damage.

Precautionary statements

P280 - Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 + P310 - 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.

Composition of Chemical

Chemical Formula: $C_4H_6O_6$

EC No 1272/2008: No Data Available

First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If: Inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

If: Skin Contact: Wash off with soap and plenty of water. Consult a physician.

If: Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If: Swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Important Symptoms: The most important known symptoms and effects are described in the labeling section.

Immediate Medical Attention: No Data Available

Firefighting Measures

Extinguishing Media: Use Water spray, Alcohol-resistant foam, Dry chemical or Carbon Dioxide.

Hazards Arising: Carbon Oxides

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Info for Firefighting: No Data Available

Accidental Release Measures

Personal Precautions: Use personal protective equipment.

Avoid dust formation.

Avoid breathing vapours, mist or gas.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Avoid breathing dust.

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

Discharge into the environment must be avoided.

Method for Containment: Pick up and arrange disposal without creating dust.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

Handling and Storage

Personal Precautions: Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Environmental Precautions: Store in cool place.

Keep container tightly closed in a dry and well-ventilated place.

Exposure Controls | Personal Protection

Derived No Effect Level (DNEL)

Workers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Consumers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Predicted No Effect Concentration (PNEC)

No Data Available

Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/Face Protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact -

Material: Nitrile rubber. Minimum layer thickness: 0,11 mm.

Break through time: 480 min. Material tested: Dermatril®.

Splash contact -

Material: Nitrile rubber. Minimum layer thickness: 0,11 mm.

Break through time: 480 min. Material tested: Dermatril®.

Data source: KCL GmbH, D-36124 Test method: EN374.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar

with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Physical and Chemical Properties

Appearance: Colourless, transparent crystals or white crystalline powder

Odour: Odourless

Odour Threshold: No Data Available

pH: 1,0 - 2 at 150 g/l at 25 °C

Melting Point: 170 - 172 °C (lit).

Boiling Point: No Data Available

Flash Point: 150 °C (closed cup)

Evaporation: No Data Available

Flammability: No Data Available

Upper/Lower Flammability or Explosive Limits: No Data Available

Vapour pressure: 5,18 - (Air = 1.0)

Vapour density: No Data Available

Relative density: No Data Available

Water solubility: Soluble

Partition Coefficient: log Pow: -1,91 at 20 °C

Auto-ignition Temperature: No Data Available

Decomposition Temperature: No Data Available

Viscosity: No Data Available

Explosive properties: No Data Available

Oxidizing properties: No Data Available

Other Safety Info: Relative vapour density 5,18 - (Air = 1.0)

Stability and Reactivity

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No Data Available

Conditions to Avoid: No Data Available

Incompatible Materials: Bases, Oxidizing agents, Reducing agents

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions - Carbon Oxides.

Toxicological Information

Acute Toxicity: LC50 Oral - Rat - > 2.000 mg/kg - (OECD Test Guideline 423).

LC50 Dermal - Rat - > 2.000 mg/kg - (OECD Test Guideline 402).

LD50 Intravenous - Mouse - 485 mg/kg - Remarks: Behavioral: Convulsions or effect on seizure threshold. Blood: Hemorrhage.

Skin Corrosion/Irritation: Rabbit -

Result: No skin irritation

(OECD Test Guideline 404)

Serious Eye damage | Eye Irritation: In vitro study -

Result: Risk of serious damage to eyes.

(OECD Test Guideline 437)

Cell Mutagenicity: No Data Available

Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No Data Available

Specific Target Organ Toxicity - Single Exposure: No Data Available

Specific Target Organ Toxicity - Repeated Exposure: No Data Available

Aspiration Hazard: No Data Available

Ecological Information

Ecological Toxicity: Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 93,31 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae:

EC50 - Algae - 51,4 mg/l - 72 h (OECD Test Guideline 201)

Ecological Persistence and degradability: Biodegradability:

Aerobic - Exposure time 28 d -

Result: 85 % - Readily biodegradable.

(OECD Test Guideline 306)

Bioaccumulative Potential: No bio-accumulation is to be expected (log Pow <= 4).

Mobility in Soil: No Data Available

Results of PBT and vPvB Assessment: This substance contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Other Adverse Effect: Harmful to aquatic life.

Disposal Considerations

Waste Treatment Methods: Product -

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Transport Information

UN Number: ADR/RID: -

IMDG: -

IATA: -

UN Shipping Hazard: ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport Hazard Class: ADR/RID: -

IMDG: -

IATA: -

Packaging Group: ADR/RID: -

IMDG: -

IATA: -

Environmental Hazards: ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special Precautions: No Data Available

Regulatory Information

Safety, Health and environmental regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

Additional Info: RTECS: WW7875000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Disclaimer

The information stated above is considered to be correct, but does not claim to be inclusive and shall only be used as a guideline. The information provided by this document is confirmed by our continuous updating of knowledge and adheres to the products appropriate safety precautions. It does not represent any guarantee of the product's properties. RLS Chemicals and its Associates shall not be held accountable for any damage's consequent of handling the above product.
