

1. IDENTIFICATION

Product Name	Tartaric acid
Other Names	d-2,3-Dihydroxybutanedioic acid; L-Tartaric acid; L-Tartaric acid, (+)-; Succinic acid, 2,3-dihydroxy-
Uses	Various applications.
Chemical Family	No Data Available
Chemical Formula	C ₄ H ₆ O ₆
Chemical Name	Butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-
Product Description	No Data Available

Supplier: Sydney Solvents Pty. Ltd.
ABN: 51 104 642 695
Street Address: 3/10 Production Place, Jamisontown NSW 2750
Telephone: 02 4722 5060
Fax: 02 4722 5070
Emergency phone: CHEMCALL: 1800 127 406
All other inquiries: 1800 60 50 40

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not scheduled

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Serious Eye Damage/Irritation - Category 1

Pictograms



Signal Word Danger

Hazard Statements **H318** Causes serious eye damage.

Precautionary Statements

Prevention	P280	Wear eye protection/face protection.
Response	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications Environmental Hazards **9.1 C** Substances that are harmful in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
L-Tartaric acid	C4H6O6	87-69-4	<=100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention.
Eye	IF IN EYES: Rinse cautiously with water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician.
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. If respiratory symptoms persist, get medical advice/attention.
Advice to Doctor	Treat symptomatically.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Combustible solid.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO ₂), normal foam or water spray for extinction.
Fire and Explosion Hazard	May form flammable dust clouds in air.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic fumes, including Carbon oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (fire kit).
Flash Point	>100 °C
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid dust formation. Avoid breathing dust and prevent contact with eyes and skin.
Clean Up Procedures	Collect material (vacuum or sweep up) and place into suitable containers for disposal (see SECTION 13); if appropriate, moisten first to prevent dusting.
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust clouds.
Decontamination	Wash area down with excess water.
Environmental Precautionary Measures	If contamination of drains or waterways has occurred, advise local emergency services.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away; Keep upwind.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid handling which leads to dust formation. Avoid breathing dust and prevent contact with eyes and skin. Use personal protective equipment as required (see SECTION 8). Dust explosion hazard - Take precautionary measures against static discharge. Keep away from heat and ignition sources - No smoking.
Storage	Store in a cool, dry and well-ventilated place. Keep container tightly closed when not in use - Check regularly for spills. Keep out of direct sunlight. Avoid exposure to moisture. Keep away from heat and ignition sources - No smoking. Keep away from incompatible materials (bases, oxidising agents, reducing agents, silver, fluorine and metal).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards:
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- Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m³ (measured as inhalable dust).
 - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m³ (total); TWA = 3 mg/m³ (respirable).
 - OSHA PEL (Particulates not otherwise regulated): TWA = 15 mg/m³ (total); TWA = 5 mg/m³ (respirable).
- Derived no-effect levels (DNELs):
- Worker, Dermal: 2.9 mg/kgbw/day
 - Worker, Inhalation: 5.2 mg/m³

Exposure Limits	No Data Available
Biological Limits	<p>Predicted no-effect concentrations (PNECs):</p> <ul style="list-style-type: none"> - Freshwater: 0.3125 mg/L - Marine water: 0.3125 mg/L - Intermittent release: 0.514 mg/L - STP: 10 mg/L - Freshwater sediment: 1.141 ppm - Marine water sediment: 1.141 ppm - Soil: 0.0449 ppm - Oral: No potential bioaccumulation.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded.
Personal Protection Equipment	<p>Respiratory protection: In case of inadequate ventilation or if an inhalation risk exists, wear a dust mask/respirator, type P1 filter or equivalent.</p> <p>Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Safety glasses with side-shields; Chemical goggles.</p> <p>Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Nitrile rubber (thickness: >0.35 mm) or Butyl rubber (thickness: >0.5 mm); Break through time: >480 min.</p> <p>Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Impervious work clothing and safety footwear for professional use.</p>
Special Hazards Precautions	No information available.
Work Hygienic Practices	Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline powder
Odour	Odourless
Colour	White
pH	2.2 (Solution 0.1 N)
Vapour Pressure	<5 Pa (@ 20 °C)
Relative Vapour Density	No Data Available
Boiling Point	179.1 °C
Melting Point	169 °C
Freezing Point	No Data Available
Solubility	1,390 g/L water 20°C
Specific Gravity	No Data Available
Flash Point	>100 °C
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1.76 g/cm ³
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available

Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Dust explosion hazard - May form flammable dust clouds in air.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Combustible solid.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating and/or toxic fumes, including Carbon oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	The product is not reactive under recommended use and storage conditions.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid dust formation. Keep away from heat and ignition sources.
Materials to Avoid	Incompatible/reactive with bases, oxidising agents, reducing agents, silver, fluorine and metal.
Hazardous Decomposition Products	Fire/decomposition may produce irritating and/or toxic fumes, including Carbon oxides.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<p>Acute toxicity: May be harmful if swallowed. Swallowing may result in nausea, vomiting, diarrhoea and abdominal pain.</p> <p>Skin corrosion/irritation: Contact with skin may result in irritation.</p> <p>Eye damage/irritation: Cause serious eye damage. A severe eye irritant; Contamination of eyes can result in permanent injury.</p> <p>Respiratory/skin sensitisation: Not sensitising.</p> <p>Germ cell mutagenicity: No mutagenic effect.</p> <p>Carcinogenicity: No information available.</p> <p>Reproductive toxicity: No information available.</p> <p>STOT - single exposure: Material may be irritating to the mucous membranes of the respiratory tract.</p> <p>STOT - repeated exposure: No information available.</p> <p>Aspiration toxicity: No information available.</p>
Acute	
Ingestion	<p>Acute toxicity (Oral):</p> <p>- LD50, Rat: <>2,000 mg/kg bw.</p>
Other	<p>Acute toxicity (Dermal):</p> <p>- LD50, Rat: >2,000 mg/kg bw.</p>
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LD50, Fish: 100 mg/L (96 h). - EC50, Daphnia: 93.3 mg/L (48 h). - ErC50, Algae: 51.4 mg/L (72 h).
Persistence/Degradability	Readily biodegradable.
Mobility	No information available.
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	Based on the n-octanol/water partition coefficient (Log Pow = -1.91), the product has a low bioaccumulation potential.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container by controlled incineration or authorised landfill and in accordance with local/regional/national regulations.
Special Precautions for Land Fill	No information available.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
Subsidiary Risk(s)	No Data Available No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
Subsidiary Risk(s)	No Data Available No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
SubsidiaryRisk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
SubsidiaryRisk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
SubsidiaryRisk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	TARTARIC ACID
Class	No Data Available
SubsidiaryRisk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information No Data Available

Poisons Schedule (Aust) Not scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR003472

National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes TAACID0300, TAACID0500, TAACID0501, TAACID0502, TAACID0600, TAACID0700, TAACID0800, TAACID0900, TAACID1000, TAACID1001, TAACID1002, TAACID1003, TAACID1004, TAACID1005, TAACID1006, TAACID1007, TAACID1008, TAACID1009, TAACID1010, TAACID1011, TAACID1012, TAACID1013, TAACID1014, TAACID1015, TAACID1016, TAACID1017, TAACID1018, TAACID1100, TAACID1101, TAACID1102, TAACID1103, TAACID1104, TAACID1105, TAACID1106, TAACID1107, TAACID1108, TAACID1109, TAACID1110, TAACID1111, TAACID1112, TAACID1113, TAACID1114, TAACID1200, TAACID1300, TAACID1301, TAACID1400, TAACID1500, TAACID1501, TAACID1600, TAACID1601, TAACID1700, TAACID1701, TAACID1702, TAACID1703, TAACID1704, TAACID1705, TAACID1706, TAACID1707, TAACID1708, TAACID1800, TAACID1900, TAACID2000, TAACID2001, TAACID2100, TAACID2101, TAACID2102, TAACID2200, TAACID2300, TAACID2301, TAACID2500, TAACID2501, TAACID2502, TAACID2503, TAACID2600, TAACID2700, TAACID2800, TAACID2801, TAACID2900, TAACID2901, TAACID3000, TAACID3001, TAACID3002, TAACID3003, TAACID3004, TAACID3005, TAACID3006, TAACID3007, TAACID3008, TAACID3100, TAACID3101, TAACID3200, TAACID3300, TAACID3400, TAACID3500, TAACID3501, TAACID3502, TAACID3600, TAACID3601, TAACID3700, TAACID3900, TAACID4000, TAACID4001, TAACID4500, TAACID4501, TAACID5000, TAACID5001, TAACID5002, TAACID5100, TAACID5200, TAACID5500, TAACID5501, TAACID6000, TAACID6200, TAACID6300, TAACID6500, TAACID6800, TAACID7000, TAACID7001, TAACID7002, TAACID7200,

TAACID7500, TAACID7501, TAACID7800, TAACID8000, TAACID8100, TAACID8101, TAACID8200, TAACID8201, TAACID8300, TAACID8500, TAACID8501, TAACID9000, TAACID9001, TAACID9002, TAACID9100, TAACID9200, TAACID9300, TAACID9400, TAACID9500, TAACID9600, TAACID9700, TAACIL1000, TAACID1801, TAACID1802, TAACID1803, TAACID1804, TAACID1805, TAACID6250, TAACID3102, TAACID6315, TAACID0200, TAACID2701, TAACID6301, TAACID3010, TAACID3020, TAACID2740, TAACID3150, TAACID2015, TAACID2020, TAACID2030, TAACID2750, TAACID2760, TAACID2770, TAACID2780, TAACID7815, TAACID3205

Revision

3

Revision Date

02 Jan 2018

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluable in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight