

Safety Data Sheet **MALIC ACID Solution**

SDS no. GM7WFGSL • Version 1.0 • Date of issue: 2024-06-11

SECTION 1: Identification

GHS Product identifier

Product name MALIC ACID Solution

Recommended use of the chemical and restrictions on use

Food acidulant, chelating agent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Serious eye damage/eye irritation, Cat. 2A

GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H319 Causes serious eye irritation

Precautionary statement(s)

P264

Wash hands thoroughly after handling.

P280

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

P305+P351+P338

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

P337+P313

If eye irritation persists: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 134.09

Components

Component	CAS no.	Concentration
MALIC ACID (EC no.: 230-022-8)	6915-15-7	35 - 50 % (weight)
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H319 - Causes serious eye irritation.		
Water (EC no.: 231-791-2)	7732-18-5	50 - 65 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Maintain eyewash fountain in work area.

If inhaled

Remove victim to fresh air. If breathing becomes difficult, seek medical attention.

In case of skin contact

Wash with plenty of soap and water. If irritation occurs seek medical advice.

In case of eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

If swallowed

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media.

Specific hazards arising from the chemical

Material does not burn. Runoff may pollute waterways

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing.

Methods and materials for containment and cleaning up

Can be neutralize with excess sodium carbonate or bicarbonate.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Do not eat, drink or smoke while handling. Wash hands with soap and water after handling. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Do not store with strong oxidizing agents, reducing agents, strong bases, amines, carbonate and alkali metals.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state

Liquid

Appearance

Clear to slightly brown solution.

Color

No data available.

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Odor	Odourless to mild.
Odor threshold	No data available.
Melting point/freezing point	-9 to -14°C
Boiling point or initial boiling point and boiling range	101°C
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	Malic acid powder ~ 2.3 (10 g/l, H2O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Malic acid powder ~530g/L at 0°C.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Density: 1.23 g/l
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidizing agents, reducing agents, strong bases, amines, carbonate and alkali metals.

Unsuitable container materials: iron, zinc, and aluminium. Aqueous solutions of malic acid may release explosive hydrogen gas if in contact with these active metals.

Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 3200 mg/kg - Malic Acid powder.

Ingestion: May be harmful if swallowed. Irritation of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms may include of nausea, vomiting and diarrhea. Moderately toxic by ingestion. May cause mild to moderate burns in the oesophagus and more severe burns in the stomach. Metabolic disturbances and systemic acidosis may occur.

Skin corrosion/irritation

Moderately irritating to the skin. Prolonged skin contact may give rise to irritation in certain sensitive individuals.

Serious eye damage/irritation

May cause eye irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated skin contact may cause dermatitis. Increased inhalation and ingestion of this material may affect behaviour and respiration causing weakness, respiratory distress and cyanosis.

SECTION 12: Ecological information

Persistence and degradability

Harmful due to pH shift.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

Canadian Domestic Substances List (DSL)

Chemical name: Butanedioic acid, hydroxy-

CAS: 6915-15-7

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

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Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)