Safety Data Sheet PROPIONIC ACID

SDS no. XXQKYGPS • Version 1.0 • Date of issue: 2025-11-10

SECTION 1: Identification

GHS Product identifier

Product name	PROPIONIC ACID

Other means of identification

Product	Product Code
PROPIONIC ACID LR Ethylformic acid, Methylacetic acid, Propanoic acid, Carboxyethane	PL051

Recommended use of the chemical and restrictions on use

Propionates, antimicrobial agents in baking and dairy products, herbicides, preservative for grains and wood chips, emulsifying agents, solutions for electroplating nickel, pharmaceuticals, artificial fruit flavours, perfume bases, cellulose propionate thermoplastics and laboratory reagent.

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

General hazard statement

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:
Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B
- Flammable liquids, Cat. 3
- Specific target organ toxicity following single exposure, Cat. 3

GHS label elements, including precautionary statements

Pictograms

Signal word **Danger**

Hazard statement(s)

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor/physcian
P312	Call a POISON CENTER/doctor/physcian if you feel unwell.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use agents recommended in Section 5 of SDS for extinction
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight	74.08

Component	Identification	Weight %	Classifications
Propionic acid	CAS no.: 79-09-4 EC no.: 201-176-3 Index no.: 607-089-00-0	100 %	CLASSIFICATIONS: Skin corrosion/irritation, Cat. 1B. HAZARDS: H314 - Causes severe skin burns and eye damage. [SCLs/M-factors/ ATEs]: STOT SE 3; H335: C ≥ 10 %; Skin Corr. 1B; H314: C ≥ 25 %; Skin Irrit. 2; H315: 10 % ≤ C < 25 %; Eye Irrit. 2; H319: 10 % ≤ C < 25 %

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Consult a physician.
In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. If persistent irritation occurs, obtain medical attention.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.
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
Small fire: Use dry chemical, CO2 or water spray.
Large fire: Use foam, fog or water spray. Do not use water jets. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical
May liberate toxic fumes in fire including oxides of carbon.

Special protective actions for fire-fighters
Wear SCBA and chemical-splash suit. Fully encapsulating, gas-tight suit should be worn for maximum protection. Structural fire fighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Evacuate the area of all non-essential personnel. Avoid substance contact.
Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms. Remove ignition sources

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up
ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 25m - All equipment used when handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours - Water spray may be used to knock down or divert vapour clouds. Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal.

SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling
Do not breathe vapour. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Take precautionary measures against static discharges. All electrical equipment must be flameproofed. Wash hands and face thoroughly after working with material. Use local exhaust extraction over processing area.

Conditions for safe storage, including any incompatibilities
Store away from sources of heat or ignition. Store away from oxidizing agents. Keep containers closed at all times. Keep container tightly closed in a dry, well-ventilated place away from direct sunlight. Store at room temperature (15 - 25 °C).
Store in a flammable goods storage area.
Corrosive to metals such as iron, steel, brass, aluminium, lead and most other metals.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 79-09-4
Propionic acid
AU/SWA (Australia): 10 ppm; 30 mg/m3 TWA inhalation

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
Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection
Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

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

Respiratory protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/ NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colourless, oily liquid.
Color	Colourless
Odor	Slightly unpleasent irritating odour.
Odor threshold	
Melting point/freezing point	-20 °C
Boiling point or initial boiling point and boiling range	141 °C
Flammability	Flammable
Lower and upper explosion limit/ flammability limit	Flammable Limits - Lower: 2.10% Flammable Limits - Upper: 12%
Flash point	54.4 °C (closed cup); 50 °C (open cup).
Auto-ignition temperature	485 °C
Decomposition temperature	No data available.
pH	2.5 (100 g/l, H2O, 20 °C)
Kinematic viscosity	Viscosity: 1.02 mPas @ 25 °C
Solubility	Solubility in Water: Miscible. Can be salted out by the addition of CaCl2 or other salts. Solubility in Organic Solvents: Soluble in alcohol, chloroform and ether.
Partition coefficient n-octanol/ water (log value)	log P(o/w): 0.33 (experimentally)
Vapor pressure	5 hPa @ 20 °C
Density and/or relative density	[14] Specific Gravity: 0.99 (@ 20 °C)
Relative vapor density	2.56
Particle characteristics	No data available.

Further safety characteristics (supplemental)
Other Information: Refractive index: 1.3862 @ 20 °C

SECTION 10: Stability and reactivity

Reactivity
Stable under normal conditions of storage and handling.
Reacts with incompatible materials
Risk of ignition. Vapours may form explosive mixtures with air

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions

Possibility of hazardous reactions: Vigorous reaction with bases yielding heat and pressure. In contact with reactive metals, may produce flammable hydrogen gas. May react violently or explosively with oxidising agents.
Hazardous Polymerization: Will not occur.

Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials
Oxidising materials, metals and strong bases.

Hazardous decomposition products
May liberate toxic fumes in fire including oxides of carbon.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Acute Toxicity - Oral: LD50 Oral - Rat - male and female - 3,455.1 mg/kg
(OECD Test Guideline 401)

Acute Toxicity - Inhalation: LC50 Inhalation - Rat - male and female - 4 h - > 20 mg/l
(OECD Test Guideline 403)

Ingestion: Burns the mucous membranes in the mouth, pharynx, oesophagus, and gastrointestinal tract. Risk of perforation in the oesophagus and stomach. Symptoms include nausea, vomiting, hematemesis, diarrhoea, hypotension, abdominal pain, dizziness, somnolence, liver and kidney damage, convulsions, coma and death. Aspiration into lungs may cause chemical pneumonitis or pulmonary edema, which can be fatal.

Inhalation: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation burns the respiratory tract, causing inflammation and edema of the larynx and bronchi, chemical pneumonitis, pulmonary edema, and may be fatal. Symptoms of exposure may include burning sensation, coughing, laryngitis, dyspnoea (shortness of breath), headache, nausea, and vomiting. May cause lung injury.

Respiratory Irritation: H335 May causes respiratory irritation.

Skin corrosion/irritation
Acute Toxicity - Dermal: LD50 Dermal - Rat - female - 3,235 mg/kg
(OECD Test Guideline 402)

Skin: Toxic if absorbed through the skin. Causes severe burns. Contact may cause severe irritation, redness, and pain. Prolonged exposures can cause burns, blistering, and tissue destruction. Readily absorbed and harmful if absorbed through skin.

Skin corrosion/irritation: H314 Causes serious skin burns and eye damage.

Serious eye damage/irritation
Eye: Contact with vapour and dilute solutions may cause redness, pain, blurred vision, and eye damage. Contact with concentrated solutions can cause corneal burns; damage may be permanent and loss of vision. Risk of blindness.

Serious eye damage/irritation: H314 Causes serious skin burns and eye damage.

Respiratory or skin sensitization
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure
Category 3

Specific target organ toxicity (STOT) - repeated exposure
Not classified based on available information.

Aspiration hazard
Not classified based on available information.

Additional information
Chronic Effects: Repeated or prolonged skin contact may cause dermatitis.

SECTION 12: Ecological information

Persistence and degradability
Readily biodegradable.

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)
UN Number: 3463
Class: 8, 3
Packing Group: II
Proper Shipping Name: PROPIONIC ACID

Hazchem emergency action code (EAC)
•3W

IMDG
UN Number: 3463
Class: 8, 3
Packing Group: II
EMS Number:
Proper Shipping Name: PROPIONIC ACID

IATA
UN Number: 3463
Class: 8, 3
Packing Group: II
Proper Shipping Name: PROPIONIC ACID

SECTION 15: Regulatory information

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

Australia SUSMP
Poison Schedule: S6

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
All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However,since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

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 fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne 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)