



Safety Data Sheet

Date of Issue: 31.07.2024

Date of Expiry: 31.07.2029

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
Facsimile : +64 9 480 4385
Emergency phone number : 0800 243 622 (24 hours)

Product Name	Propionic Acid
Product Code	44308
CAS No.	79-09-4

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification

Flammable liquids (Category 3)
Skin corrosion/irritation (Category 1B)
Serious eye damage/eye irritation (Category 1)
Specific target organ toxicity - single exposure (Category 3), Respiratory system.

2.2 GHS Label elements, including precautionary statements

Pictogram



DANGER

Hazard statement(s)

H226 Flammable liquid and vapor.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statement(s)

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
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.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage

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.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

Rapidly absorbed through skin.

3: Composition/information on ingredients

3.1 Substances

Synonyms	:	Propanoic acid Propanyl acid
Formula	:	C3H6O2
Molecular weight	:	74.08 g/mol
CAS-No.	:	79-09-4
EC-No.	:	201-176-3
Index-No.	:	607-089-00-0

Component	Classification	Classification
Propionic acid		
		<= 100 %

4: First aid measures

4.1 Description of 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.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

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

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Dry powder, Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Carbon oxides , Combustible liquid.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

6.4 Reference to other sections

For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Propionic acid	79-09-4	WES-TWA	10 ppm 30 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

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.

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 or 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.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form	:	liquid, clear
Colour	:	colourless
b) Odour	:	No data available
c) Odour Threshold	:	No data available
d) pH 2.5 at 100 g/l at 20 °C	:	
e) Melting point/freezing point	:	-24 - -23 °C
f) Initial boiling point and boiling range	:	141 - 142 °C
g) Flash point	:	54 °C - closed cup
h) Evaporation rate	:	No data available
i) Flammability (solid, gas)	:	No data available
j) Upper/lower flammability or explosive limits	:	
Upper explosion limit	:	12.1 %(V)
Lower explosion limit	:	2.9 %(V)

k) Vapour pressure	:	3.2 hPa at 20 °C
l) Vapour density	:	2.56 - (Air = 1.0)
m) Relative density	:	0.992 g/cm ³
n) Water solubility	:	soluble
o) Partition coefficient : n-octanol/water log Pow	:	0.25
p) Auto-ignition temperature	:	440 °C at 1,013 hPa
q) Decomposition temperature	:	No data available
r) Viscosity	:	No data available
s) Explosive properties	:	No data available
t) Oxidizing properties	:	No data available

9.2 Other safety information

Surface tension	:	27.21 mN/m at 15 °C
Dissociation constant	:	4.88
Relative vapour density	:	2.56 - (Air = 1.0)

10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames, and sparks.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products

No data available

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - 3,455.1 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 20 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rat - female - 3,235 mg/kg

(OECD Test Guideline 402)

LD50 Parenteral - Rat - 3,500 mg/kg

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

reverse mutation assay

S. typhimurium

Result: negative

OECD Test Guideline 474

Hamster - male and female

Result: negative

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

12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 20 d

Result: 93 % - Readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted

12.6 Other adverse effects

No data available

13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Contaminated packaging

Dispose of as unused product.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	UN Number	3463	3463	3463
14.2	UN Proper Shipping name	PROPIONIC ACID	PROPIONIC ACID	Propionic acid
14.3	Transport Hazard Class	8 (3)	8 (3)	8 (3)
14.4	Packaging group	II	II	II
14.5	Environmental Hazards	no	no	no
14.6	Special precautions for user	None		
14.7	Incompatible materials	Strong oxidizing agents		

15: Regulatory information

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

National regulatory information

HSNO Approval Code: HSR003071

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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