



Safety Data Sheet

Date of Issue: 28.03.2022

Date of Expiry: 28.03.2027

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	Propanal
Product Code	43931
CAS No.	123-38-6

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification

Flammable Liquids (Category B), H225
Acute toxicity, Oral (Category D), H302
Acute toxicity, Inhalation (Category D), H332
Acute toxicity, Dermal (Category E), H313
Skin irritation (Category A), , H315
Acute toxicity (Category E), Respiratory system, H335
Aquatic toxicity (Acute or Chronic) (Category D), H402

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word : **Danger**

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H313 May be harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Precautionary statement(s)

Prevention

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P330 Rinse mouth.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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

Stench.

3: Composition/information on ingredients

3.1 Substances

- Synonyms : Propionaldehyde
- Formula : C3H6O
- Molecular weight : 58.08 g/mol
- CAS-No. : 123-38-6
- EC-No. : 204-623-0
- Index-No. : 605-018-00-8

Hazardous ingredients

Component	Classification	Concentration
Propanal		
	3.1 B; 6.1 D; 6.1 E; 6.3 A; 6.1 E; 9.1 D; H225, H302, H332, H313, H315, H335, H402	<= 100 %

4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact :

Rinse skin with water/shower. Take off immediately all contaminated clothing. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact :

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion :

Rinse mouth out with water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media :

dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

Unsuitable extinguishing media :

Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

Fire hazard :

Highly flammable liquid and vapour.

Explosion hazard :

May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting :

Do not attempt to take action without suitable protective equipment

6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures :

Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures :

Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment :

Use personal protective equipment as required.

Emergency procedures :

Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up :

On land, sweep or shovel into suitable containers. Shovel or sweep up and put in a closed container for disposal.

Small quantities of liquid spill :

take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

No additional information available

7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed :

Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling :

No open flames. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures :

Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures :

Proper grounding procedures to avoid static electricity should be followed.

Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

Storage conditions :

Keep in fireproof place. Keep container tightly closed.

Incompatible materials :

Heat sources.

7.3. Specific end use(s)

No additional information available

8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits Table

-

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	Wear appropriate mask

9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Molecular mass	:	58.08 g/mol
Colour	:	Clear Colorless.
Odour	:	stench.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	-81 °C
Freezing point	:	No data available
Boiling point	:	46 - 50
Flash point	:	-40 °C
Auto-ignition temperature	:	175 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Flammable Highly flammable liquid and vapour.
Vapour pressure	:	343 hPa at 20 °C
Relative vapour density at 20 °C	:	1.8
Relative density	:	No data available
Density	:	0.807 g/cm ³
Solubility	:	Water: Complete
Log Pow	:	0.83
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	0.026 - 0.161 vol %

9.2. Other information

No additional information available

10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Exothermic reaction with:

alkali hydroxides

mineral acids

Oxidizing agents

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

11.2 Additional Information

RTECS: UE0350000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

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

After absorption:

Tiredness

narcosis

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

12: Ecological information

12.1 Toxicity

Toxicity to fish

static test LC50 - Pimephales promelas (fathead minnow) - 14 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 88.7 mg/l - 48 h

(Regulation (EC) No. 440/2008, Annex, C.2)

Toxicity to algae

static test ErC50 - Desmodesmus subspicatus (green algae) – 260 mg/l - 72 h

(DIN 38412)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: ca.91 - 97 % - Readily biodegradable.

(OECD Test Guideline 301C)

Ratio BOD/ThBOD 95 %

Ratio BOD/ThBOD 38 %

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

Discharge into the environment must be avoided.

13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations :

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information :

Handle empty containers with care because residual vapours are flammable.

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	1275	1275	1275
14.2	UN Proper Shipping name	PROPIONALDEHYDE	PROPIONALDEHYDE	Propionaldehyde
14.3	Transport Hazard Class	3	3	3
14.4	Packaging group	II	II	II
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	none		
14.7	HAZCHEM Code	.2YE		

15: Regulatory information

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

National regulatory information

HSNO Approval Code: HSR001216

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.

****END*****END*****END*****END*****END****