

Safety Data Sheet

Date of Issue: 22.10.2021 Date of Expiry: 22.10.2026

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)

Supplier : Timstar Laboratory Supplies Ltd

Address : Phoenix House, Battlefield Enterprise Park, Stafford Drive

Shrewsbury Shropshire SY1 3FE, United Kingdom

Product Name	Universal Indicator, full range 1-14		
Product Code	UN13005		
CAS No.	64-17-5		

Recommended use : Laboratory Investigations

2: Hazard's identification

GHS Classification

Physical Hazards: Flammable Liquids, Cat 2

Health hazards: Serious Eye Damage/Eye Irritation, Cat 2, Spec target organ toxicity, Cat 2

2.2 GHS Label elements, including precautionary statements Hazard Pictogram







Signal word : Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H317 May cause damage to organs

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.

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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- 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.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal

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

2.3 Other hazards - none

3: Composition/information on ingredients

3.1 Mixtures

Component Classification Concentration

Component	Cas No.	EEC No.	Reach No.	Conc. w/w	CLP Classification (1272/2008/CE)
Ethanol	64-17-5	200-578-6	01-2119457610- 43-XXXX	63.6%	Flam. Liq. 2,Eye Irrit. 2 3.1 B; 6.4 A;
Methanol	67-56-1	200-659-6	01-2119433307- 44-XXXX	3%	Flam. Liq. 2,Acute Tox. 3 (O),Acute Tox. 3 (D),Acute Tox. 3 (I),STOT SE 1 3.1 B; 6.1 C; 6.9 A;

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.

lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eve 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

Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

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.

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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.

7.3 Specific end use(s)

No data available

8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Component	Cas No.	Conc. %	Workplace exposure Limits: Long Term (8hr TWA)	Workplace exposure limits : Short Term (15min period)
Ethanol	64-17-5	63.6%	1000.0 ppm / 1920.0 mg/m-3	- / -
Methanol	67-56-1	3%	200.0 ppm / 266.0 mg/m-3	250.0 ppm / 333.0mg/m-3

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

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, Flame retardant antistatic protective clothing., 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 respirator. 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

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Green solution which changes colour with pH.

Odour : Fresh and characteristic.

pH : 7 @ 20°C Boiling Point : 80°C Melting Point : -45°C

Flash Point : 23°C (Closed cup)

Upper Flammable Limit : 19% Lower Flammable Limit : 3.3% Auto Ignition : 363°C

Explosive Properties : Moderate/severe in confined spaces.

Oxidising Properties : No.

Vapour Pressure : 59mmHg @ 20°C

Relative Density : 0.8630

Water Solubility : Completely miscible in water.

10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical Stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to Avoid

Hot surfaces, naked flames or other sources of ignition.

10.5 Incompatible Materials

Strong oxidising agents. Nitric acid. Silver nitrate, potassium perchlorate, chromyl chloride, chromium trioxide and permanganic acid. Peroxides, potassium permanganate, sodium, potassium, platinum, potassium tertiary butoxide.

10.6 Hazardous Decomposition Products

None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

11: Toxicological information

11.1 Information on toxicological effects

Eyes:

The liquid will cause conjunctival irritation and corneal damage. High concentrations of vapour may be irritating to the eyes.

Skin -

Repeated or prolonged contact may defat the skin producing irritation and dermatitis. Unlikely to be absorbed across the skin in harmful amounts.

LD50 Skin:

Not available

Ingestion:

Low order of acute toxicity. Fatal dose in man 300-400ml. Ingestion of large amounts will produce central nervous system depression.

Symptoms may include nausea, vomiting muscular incoordination and loss of consciousness.

Aspiration during swallowing or vomiting may injure lungs.

LD50 Oral:

Not available

Inhalation:

Exposure to vapour concentrations above the occupational exposure limits may produce irritation of the eyes and respiratory tract.

High concentrations of vapour may produce central nervous system depression and unconsciousness.

Symptoms will be similar to those following ingestion.

LD50 Inhalation:

Not available

TCLo:

Not available

Carcinogenicity:

Not considered to be a carcinogen.

Mutagenicity:

Not considered to be a mutagen.

Reproductive Effects:

Some evidence for foetoxicity and tetragenecity has been observed in experimental animals treated with high doses of ethanol during gestation.

Other Information

Contains methanol. This will not constitute a special problem since ethanol is preferentially metabolised. Chronic intoxication may however produce damage to the optic nerve.

12: Ecological information

12.1 Toxicity

Ethanol is readily biodegradable after 15 days in non-acclimated fresh water. 75% biodegradability occurs after 20 days in salt water.

LC50 Algal: Not available

LC50 Crustacea: Not available

LC50 Fish: Not available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT & vPvB assessment

Assessment not required.

12.6 Other adverse effects

None known at present.

13: Disposal considerations

13.1 Waste treatment methods Disposal Methods

Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.

Contaminated Packaging

Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

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	1170	1170	1170
14.2	UN Proper	ETHANOL	ETHANOL	Ethanol Solution
	Shipping name	SOLUTION	SOLUTION	

14.3	Transport	3	3	3
	Hazard Class			
14.4	Packaging group		II	II
14.5	Environmental	See section 12	See section 12	See section 12
	Hazards			
14.6	Special	No special precautions required.		
	precautions for			
	user			

15: Regulatory information

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

National regulatory information

HSNO Approval code: HSR002596 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.