



Safety Data Sheet

Date of Issue: 30.10.2020

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1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**
Address : PO Box 34125, Birkenhead, Auckland 0746
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Emergency phone number : 0800 243 622 (24 hours)

Product	2-Ethoxyethanol			Code	2310,3716, L216
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
110-80-5	HSR001156	1171	3	III	

Recommended use : Laboratory Investigations

2: Hazards identification

2.1 GHS Classification

Flammable Liquids (Category C), H226
Acute toxicity, Oral (Category E), H303
Acute toxicity, Inhalation (Category C), H331
Acute toxicity, Dermal (Category E), H313
Eye irritation (Category A), H320
Toxic to Reproduction (Category A), H360
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word **Danger**

Hazard statement(s)

H226 Flammable liquid and vapour
H303 May be harmful if swallowed.
H313 May be harmful in contact with skin.
H320 Causes eye irritation.
H331 Toxic if inhaled.
H360 May damage fertility or the unborn child.

Precautionary statement(s)

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
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.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P311 Call a POISON CENTER/ doctor.
P321 Specific treatment (see supplemental first aid instructions on this label).
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 + 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.
Restricted to professional users.

2.3 Other hazards – none

3: Composition/information on ingredients

3.1 Substances

Synonyms	: Cellosolve® Ethylene glycol monoethyl ether Ethyl glycol
Formula	:C4H10O2
Molecular weight	:90.12 g/mol
CAS-No.	:110-80-5
EC-No.	:203-804-1
Index-No.	:603-012-00-X

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

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

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 (see section 2.2) and/or in section 11

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.

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

Wear respiratory protection. 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.

For personal protection see section 8.

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 (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 exposure - obtain special instructions before use. 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.

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.

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
2-Ethoxyethanol	110-80-5	WES-TWA	5 ppm 18 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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 with multi-purpose combination (US) or type ABEK (EN 14387) 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 such as NIOSH (US) or CEN (EU).

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 : Colour: colourless
b) Odour	: ether-like
c) Odour Threshold	: No data available
d) pH	: at 20 °C neutral
e) Melting point/freezing point	: Melting point/range: -90 °C - lit.
f) Initial boiling point and boiling range	: 135 °C - lit.
g) Flash point	: ca. 40 °C at ca. 1,013 hPa - 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	: 14 % (V)
Lower explosion limit	: 1.8 % (V)
k) Vapour pressure	: 7.51 hPa at 25 °C
l) Vapour density	: 3.1
m) Relative density	: 0.93 g/mL at 25 °C
n) Water solubility	: soluble
o) Partition coefficient: n-octanol/water (ECHA)	: log Pow: 0.32 - Bioaccumulation is not expected.,
p) Auto-ignition temperature at 1,013 hPa	: 235 °C
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

Solubility in other solvents	: Methanol at 20 °C -soluble Ether at 20 °C -soluble
Dissociation constant	: 14.8
Relative vapour density	: 3.1

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

Oxidizing agents, Copper

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Guinea pig - male and female - 1,400 mg/kg

Remarks: (Regulation (EC) No 1272/2008, Annex VI) (ECHA)

LC50 Inhalation - Rat - female - 4 h - 14.72 mg/l

(Calculation method)

Remarks: (ECHA) (Regulation (EC) No 1272/2008, Annex VI)

LD50 Dermal - Rabbit - male - 3,271 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: slight irritation - 1 h

(Draize Test)

Respiratory or skin sensitisation

Maximisation Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Ames test

Salmonella typhimurium

Result: negative

(National Toxicology Program)

In vitro mammalian cell gene mutation test

Mouse lymphoma test

Result: Positive results were obtained in some in vitro tests.

(National Toxicology Program)

Chromosome aberration test in vitro

Chinese hamster ovary cells

Result: positive

(National Toxicology Program)

Mouse - male and female - Bone marrow

Result: negative

(ECHA)

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

May damage the unborn child. May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: KK8050000

Acute symptoms of overexposure include: narcosis, Liver injury may occur., Kidney injury may occur.

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

12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - > 10,000 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia (water flea) - 1,892.52 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to algae static test NOEC - Desmodesmus subspicatus (green algae) - \geq 1,000 mg/l - 72 h

Remarks: (ECHA)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 14 d

Result: 63 - 83 % - Readily biodegradable.

(OECD Test Guideline 301C)

Biochemical Oxygen Demand (BOD)

1,100 mg/g

Remarks: (IUCLID)

Chemical Oxygen Demand (COD)

1,890 mg/g

Remarks: (IUCLID)

Theoretical oxygen demand

1,950 mg/g

Remarks: (IUCLID)

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

Additional ecological 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.

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	1171	1171	1171
14.2	UN Proper Shipping name	ETHYLENE GLYCOL MONOETHYL ETHER	ETHYLENE GLYCOL MONOETHYL ETHER	Ethylene glycol monoethyl ether
14.3	Transport Hazard Class	3	3	3
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	no	no	no
14.6	Special precautions for user	None		
14.7	Incompatible materials	Oxidizing agents, Copper		

15: Regulatory information

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

National regulatory information

HSNO Approval Code: HSR001156

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

Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

Notification status

AICS: On the inventory, or in compliance with the inventory

DSL: All components of this product are on the Canadian DSL

ENCS: On the inventory, or in compliance with the inventory

ISHL: On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

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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