



Safety Data Sheet

Date of Issue: 05.08.2020

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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	Triethylamine			Code	W635
CAS#	HSNO#	UN #	DG Class/es	Packing group #	Tracking
121-44-8	HSR001228	1296	3 (8)	II	No

Recommended use : Laboratory Investigations

2: Hazards identification

New Zealand hazards classification: 3.1B, 6.1C (All), 6.1C (D), 6.1D (I), 6.1D (O), 8.2B, 8.3A, 9.1D (All), 9.1D (F), 9.3B.

2.1 GHS Classification

Flammable Liquids (Category B), H225
Acute toxicity, Oral (Category D), H302
Acute toxicity, Inhalation (Category A), H330
Acute toxicity, Dermal (Category B), H310
Skin corrosion (Category A), H314
Serious eye damage (Category A), H318
Aquatic toxicity (Acute or Chronic) (Category D), H402

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram



SIGNAL WORD : DANGER

Hazard statement(s)

H225 : Highly flammable liquid and vapour.
H302 : Harmful if swallowed.
H310 : Fatal in contact with skin.
H314 : Causes severe skin burns and eye damage.
H330 : Fatal if inhaled.
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.
P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
P262 : Do not get in eyes, on skin, or on clothing.
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.
P284 : Wear respiratory protection.

Response

- P301 + P312 : IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P310 : Immediately call a POISON CENTER/doctor.
P363 : Wash contaminated clothing 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 none

3: Composition/information on ingredients

Substance/mixture: substance

3.1 Substances

Formula : C₆H₁₅N
Molecular wt : 101.19 g/mol
CAS No. : 121-44-8
EC number : 204-469-4
Index number : 612-004-00-5

Hazardous components

Component	Classification	Concentration
Triethylamine	3.1 B; 6.1 D; 6.1 A; 6.1 B; 8.2 A; 8.3 A; 9.1 D; H225, H302, H330, H310, H314, H318, H402	<=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. Take victim immediately to hospital. 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.

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, nitrogen oxides (NO_x).

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.

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 non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal.

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

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.

8: Exposure controls/personal protection

8.1 Control parameters Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Triethylamine	121-44-8	WES-STEL	5 ppm 20 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
		WES-TWA	3 ppm 12 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 49 min

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.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance

Form : liquid

Colour : colourless

b) Odour : amine-like

c) Odour Threshold : No data available

d) pH : 12.7 at 100 g/l at 15 °C

e) Melting point/freezing point	
Melting point/range	: -115 °C - lit.
f) Initial boiling point and boiling range	: 88.8 °C - lit.
g) Flash point	: -11 °C - c.c.
h) Evaporation rate	: No data available
i) Flammability (solid, gas)	: No data available
j) Upper/lower flammability or explosive limits	
Upper explosion limit	: 9.3 %(V)
Lower explosion limit	: 1.2 %(V)
k) Vapour pressure	: 72 hPa at 20 °C
l) Vapour density	: 3.48
m) Relative density	: 0.726 g/cm ³ at 25 °C
n) Water solubility	: 112.4 g/l at 20 °C - soluble
o) Partition coefficient: n-octanol/water	: log Pow: 1.45 - Bioaccumulation is not expected.
p) Auto-ignition temperature	: No data available
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

Relative vapour density : 3.48

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

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x)

In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - 730 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 3.63 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male - 580 mg/kg

(OECD Test Guideline 402)

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage.

(OECD Test Guideline 405)

Risk of corneal clouding. Causes serious eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Ames test

Salmonella typhimurium

Result: negative

Rat - male - Bone marrow

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

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: YE0175000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

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

Central nervous system - Irregularities - Based on Human Evidence

12: Ecological information

12.1 Toxicity

Toxicity to fish

LC50 - Oryzias latipes (Orange-red killifish) - 24 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

semi-static test LC50 - Ceriodaphnia dubia (water flea) - 17 mg/l - 48 h

(US-EPA)

semi-static test LC50 - Ceriodaphnia dubia (water flea) - 17 mg/l - 48 h

(US-EPA)

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 8 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - Pseudomonas putida - 95 mg/l - 17 h
(DIN 38421 TEIL 8)

12.2 Persistence and degradability

Biodegradability:

aerobic - Exposure time 29 d

Result: 80.3 % - Readily biodegradable.

(OECD Test Guideline 301B)

12.3 Bioaccumulative potential

Bioaccumulation :

Cyprinus carpio (Carp) - 42 d

at 25 °C - 0.5 mg/l(Triethylamine)

Bioconcentration factor (BCF): < 0.5

(OECD Test Guideline 305C)

Remarks: Does not bioaccumulate.

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

Toxic to aquatic life.

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	1296	1296	1296
14.2	UN Proper Shipping name	TRIETHYLAMINE	TRIETHYLAMINE	Triethylamine
14.3	Transport Hazard Class	3 (8)	3 (8)	3 (8)
14.4	Packaging group	II	II	II
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	Strong oxidising agents		

15: Regulatory information

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

National regulatory information

HSNO Approval Code: HSR001228

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

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

PICCS: 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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