

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS FOLLOWING

Issue: December 18

PRODUCT: Ethyl Acetate
Other Names: Acetic acid ethyl ester, Vinegar Naphtha, Ethyl Ethanoate
Uses: Industrial Solvent
Signal Word: Danger

UN No.	1173
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	II
Hazchem	3YE

Hazardous Nature:	This product is classified as hazardous under HSNO criteria
Hazardous Classification:	31B, 6.1E (oral), 6.4A, 6.9B
HSNO Approval Number:	HSR001041
Exposure Standards:	TWA: 720 mg/m ³ (200 ppm): STEL: Not established

Physical Characteristics (Typical)

Section 9 of SDS

Appearance: Clear, colourless liquid
Boiling Point/ Range (°C): 77
Flash Point (°C): -4
Specific Gravity/ Density (g/ml @ 15°C): 0.90 @ (20°C)
Chemical Stability: Stable at room temperature and pressure

Product Ingredients

Section 3 of SDS

Ethyl Acetate	141-78-6	100
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For further ingredients information, please refer to the full SDS.

GHS Pictograms

Section 2 of SDS



For further risk and safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993. Products not classed as Dangerous Goods are designated as not regulated for transport or N/R (non-regulated).
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials classified with risks such as potential for misuse, like flammability, or explosions when heated and ignited, may be both classed as Dangerous Goods and Hazardous Substances.

1. IDENTIFICATION

Product Name:	Ethyl Acetate
Other Names:	Acetic acid ethyl ester, Vinegar Naphtha, Ethyl Ethanoate
Chemical Family:	Acetate
Recommended Use:	Industrial Solvent
Supplier:	ASCC Limited
Street Address:	112A Bush Road, Rosedale, Auckland, New Zealand
Telephone:	(09) 966 2447
Emergency phone:	0800 243 622 (24 hours) +64 4 917 9888 (Outside NZ)
National Poisons Centre:	0800 764 766

2. HAZARDS IDENTIFICATION

Hazardous Nature

This product is classified as hazardous under HSNO criteria

Hazardous Classification

31B, 6.1E (oral), 6.4A, 6.9B

GHS Pictograms



Hazard Statements

H225: Highly flammable liquid and vapour

H303: May be harmful if swallowed

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/light/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

Response Statements

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304+P340: IF INHALED: Remove person to fresh air and keep 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.

P337+P313: If eye irritation persists get medical advice/attention.

P312: Call a POISON CENTER/ doctor/.../if you feel unwell.

Disposal Statements

P501: Dispose of contents, or container in accordance with local/regional/national/international regulation.

Storage Statements

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

Dangerous Goods Classification 3

Signal Word Danger

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%v/v)
Ethyl Acetate	141-78-6	100

4. FIRST AID MEASURES

For advice, contact National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration

Eye Contact

Flush eyes with large amounts of water for at least 15 minutes, holding eyelids open. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Remove patient to fresh air. Keep at rest. If rapid recovery does not occur, medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

This material will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

Suitable extinguishing media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only

Do not use water in a jet

Hazards from combustion products

Carbon monoxide and carbon dioxide

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3YE

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for safe handling

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark). Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 10 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Handling temperature: ambient.

Conditions for safe storage

Store in a cool, dry, well-ventilated place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress.

Incompatible materials

Keep away from aerosols, flammables, oxidizing agents, corrosives and from products harmful or toxic to man or to the environment.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week for this product is: 720 mg/m³ (200 ppm).

The short-term exposure limit (STEL), which is the maximum allowable exposure concentration at any time is: Not established.

Biological limit values

Not available

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Odour	-	Pleasant, non residual
Odour Threshold	ppm	Not available
Melting Point/Range	°C	-83.6
Boiling Point/ Range	°C	77
Flash Point	°C	-4
Density @ 15°C	g/ml	0.90 @ (20oC)
Vapour Pressure @ 20°C	kPa	37.000 Pa at 50degC 9.800 Pa at 20deg C
Explosive Limits (LEL – UEL)	%	2.1 – 11.5
Vapour Density @ 20°C	kPa	3
Autoignition Temperature	°C	460
Viscosity @ 20°C	cSt	0.45 mPa.s
pH	-	Not applicable
Partition Coefficient	-	0.73
Percent Volatiles	%	Not available
Solubility with Water	% w/w	77 g/La t 20degC Forms an azeotrope with water which boils at 70.4degC, containing 91.8% EtAc

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY**Chemical Stability**

Stable at room temperature and pressure

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

Carbon monoxide, carbon dioxide, and other organic compounds on incomplete burning or oxidation

Hazardous reactions

None specified

Hazardous Polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION**Acute Effects*****Ingestion***

Swallowing can result in nausea, vomiting, shortness of breath, headache, drowsiness, and dizziness, loss of consciousness and possible death.

Eye Contact

Vapour and liquid are eye irritants. Symptoms include redness, swelling and temporary corneal damage.

Skin Contact

Not irritating to skin.

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis

Inhalation

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Chronic Effects

Repeated or prolonged skin contact may lead to irritant contact dermatitis.

May cause damage to organs through prolonged or repeated exposure

Blood: may cause haemolysis of red blood cells and/or anaemia. Effects were seen at high doses only.

Other Health Effects Information

Individuals with pre-existing skin or respiratory conditions may be sensitive to this product.

Toxicological Information

LD₅₀: Oral: 4100 mg/kg (rat)

Inhalation: 1600 ppm/ 8hr (rat); LC50 >20 mg/L (rat)

Acute Toxicity (6.1A, 6.1B, 6.1C, 6.1D):

May be harmful if swallowed

Aspiration Hazard (6.1E): Not classified

Respiratory Irritation (6.1E): Inhalation of vapours or mists may cause irritation to the respiratory system

Skin Corrosion/Irritation (8.2A, 8.2B, 8.2C, 6.3A): Not classified as a skin irritant.

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis

Serious Eye damage/irritation (8.3A, 6.3A): Moderately irritating to eyes.

Respiratory or Skin Sensitisation (6.5A, 6.5B): Not classified as a skin or respiratory sensitizer

Germ cell mutagenicity (6.6A, 6.6B): Not classified as mutagenic

Carcinogenicity (6.7A, 6.7B): Not classified

Not expected to be carcinogenic

Reproductive Toxicity (6.8A, 6.8B, 6.8C): Not classified

Insufficient information to make an assessment

Specific Organ Toxicity (Repeated and Single Exposure) (6.9A, 6.9B):

Harmful to human target organs or systems

NOAEL (rat, inhalation, 90 d) = 0.002 mg/L

Remark: 0.010 and 0.043 mg/l: significantly increased number of leukocytes after 30 d; increased motoric chronaxy after 15 and 30 d; decreased cholinesterase activity during

Narcotic Effects (6.9B): High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death

12. ECOLOGICAL INFORMATION**Ecotoxicity****Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC50: (Rainbow Trout): 260000 µg/L
Daphnia Magna EC ₅₀ (48 hr):	LC50: 175000 µg/L
Blue-green algae (Toxicity threshold 7-8 days):	LOEC: 150000 µg/L
Green algae (Toxicity threshold 7-8 days):	LOEC: 550000 µg/L

Persistence/ degradability

Volatilises in air

Readily biodegradable meeting the 10 day window criterion.

Mobility

Dissolves in water.

If product enters soil, it will be highly mobile and may contaminate groundwater

Oil/ water partition coefficient: log P = 0.66- 0.73; ThOD (Theoretical Oxygen Demand): 1.82

13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as chemical waste in accordance with the local authority.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1173	UN No.	1173	UN No.	1173
Proper Shipping Name	Ethyl Acetate	Proper Shipping Name	Ethyl Acetate	Proper Shipping Name	Ethyl Acetate
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	II	Pack Group	II	Pack Group	II
Hazchem	3YE	Hazchem	3YE	Hazchem	3YE

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group II.

**15. REGULATORY INFORMATION**

Country/ Region: New Zealand

Inventory: NZIoC

Status: Listed

HSNO Approval: HSR001041: Acetic acid ethyl ester

HSNO Controls:

Certified Handler: Not required;

Tracking; Not required

Fire Extinguishers: Trigger quantity 250L

Emergency Response Plan: Trigger quantity 1,000L

Secondary Containment: Trigger quantity 1,000L

Signage: Trigger quantity 250L

16. OTHER INFORMATION

Reasons for Issue: Updated company contact details

Replaces SDS dated: 12 March 2018

New SDS issue date: 6 December 2018

Abbreviations:

NZIoC: New Zealand Inventory of Chemicals

CAS Number: Chemical Abstracts Number

CCID: Chemical Classification and Information Database

EC₅₀: Effective Concentration, 50 per cent

IARC: International Agency for Research on Cancer

HSNO: Hazardous Substances and New Organisms

LC₅₀: Lethal Concentration, 50 per cent

LD₅₀: Lethal Dose, 50 per cent

LOEC: Lowest observed effect concentration

NOAEL: No-observed-adverse-effect-level

References:

- Supplier Safety Data Sheets
- EPA CCID <https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/> (December 18)
- Workplace Exposure Standards and Biological Exposure Indices. 9th Edition, published by WorkSafe New Zealand November 2017. <https://worksafe.govt.nz/topic-and-industry/work-related-health/monitoring/exposure-standards-and-biological-exposure-indices> (December 18)
- <http://chem.sis.nlm.nih.gov/chemidplus> (December 18)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (December 18)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact ASCC Limited.