<u>SDs numb</u>	<u>ber</u>	<u>Product</u>	<u>lssue</u>	<u>d</u>	<u>Expires</u>
<u>V193</u>	A	<u>cetic acid</u>	<u>16.9.20</u>	18	<u>16.9.2023</u>
Jser declarati	on:- I have re	ad and unders	tood this Saf	ety Dat	ta Sheet
Name:		Signature			Date
	<u>1. IDENTIF</u>	ICATION OF THE M	ATERIAL AND	UPPLIER	
Company Name					
		ЕСР LTD			
Address: 39 Woodside Ave, Northcote, Auckland , New Zealand					
Emergency Tel:         NZ 0800154666         Tel +64 9 480 4386         FAX +64 9 480 4386		9 480 4385			
Product	Acetic Aci	d, Glacial		Code	1040
CAS#	HSNO#	UN #	DG Clas	s/es	Packing group #
	HSR000975	2789	8		11

### Approved handlers certificate :- NOT REQUIRED Tracking : NOT Required

Recomended use: Laboratory Investigations

2. Hazards Identification

## 2.1 GHS Classification

Flammable Liquids (Category C) Acute toxicity, Oral (Category E) Acute toxicity, Inhalation (Category C) Acute toxicity, Dermal (Category D) Skin corrosion (Category A) Serious eye damage (Category A) Skin sensitisation (Category B) Aquatic toxicity (Acute or Chronic) (Category D) **2.2 GHS Label elements, including precautionary statements** 



Hazard statement(s) H226 Flammable liquid and vapour. H303 May be harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H331 Toxic 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.

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.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

Response

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 or doctor/ physician.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

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

Hazard Classification	Australia: Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC). Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
	New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. Classified as Dangerous Goods for transport according to the NZS 5433:1999

Classified as Dangerous Goods for transport according to the NZS 5433:1999 Transport of Dangerous Goods on Land. HSNO Classification:

3.1C - Substance that is a Flammable Liquid: Medium Hazard.

- 6.1D Substance that is acutely toxic.
- 6.9B Substance that is harmful to human target organs or systems.
- 8.1A Substance that is corrosive to metals.
- 8.2B Substance that is corrosive to dermal tissue.
- 8.3A Substance that is corrosive to ocular tissue.
- 9.1D Substance that is slightly harmful in the aquatic environment.
- 9.3C Substance that is harmful to terrestrial vertebrates.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Acetic acid	64-19-7	99-100 %
	4. FIRST AID MEASURES		
Inhalation	Remove the source of con immediate medical atten		ove the victim to fresh air. Seek
Ingestion	Do NOT induce vomiting. immediate medical atten		with large amounts of water. Seek
Skin	If skin or hair contact occ with running water. Seek		aminated clothing and flush skin and hair cal attention.
Eye	Continue flushing until ac	dvised to stop by	eye continuously with running water. the Poisons Information Centre or a mediate medical attention.
First Aid Facilities	Eye wash station, safety s	shower and norm	al washroom facilities.
Advice to Doctor	Treat symptomatically.		
Other Information	-	•	ons Information Centre (Phone eg SON / 0800 764 766) or a doctor at once.
	5. FIRE FIGHTING MEASU	RES	

**Suitable** Extinguish fire with foam, dry chemical powder, carbon dioxide, water fog or water **Extinguishing Media** spray.

Hazards from Combustion products include carbon monoxide and carbon dioxide.

Combustion Products	
Specific Hazards	Flammable liquid. Vapour/air mixtures may ignite explosively. Vapours are heavier than air and may travel long distances to an ignition source and flash back. Heating can cause expansion or decomposition leading to violent rupture of containers.
Hazchem Code	2P
Precautions in connection with Fire	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours, fumes or products of combustion. Water spray may be used to cool down heat-exposed containers. If safe to do so, remove containers from path of fire. Do not allow run-off from fire fighting to enter drains or water courses.
	6. ACCIDENTAL RELEASE MEASURES
Emergency Procedures	Wear appropriate personal protective equipment and clothing to prevent exposure. Evacuate all unnecessary personnel. Stop the leak if safe to do so. Increase ventilation. If possible contain the spill. Collect the material and place into suitable labelled containers for subsequent recycling or disposal. If contamination of sewers or waterways occurs inform the local water authorities and EPA in accordance with local regulations. Dispose of waste according to applicable local and national regulations.
	7. HANDLING AND STORAGE
Precautions for Safe Handling	e Corrosive liquid. Attacks skin and eyes. May produce severe burns. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Avoid breathing in vapours, mist or fumes. Keep containers closed when not in use. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.
Conditions for Safe Storage	Store in a cool, dry well-ventilated area away incompatible materials. Keep containers tightly closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks.
	8. EXPOSURE CONTROLS/PERSONAL PROTECTION
National Exposure Standards	No exposure standards have been established for the mixture by the Australian National Occupational Health & Safety Commission (NOHSC) or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. The available exposure limits for the ingredients are listed below:

	Australian National Occupational Health And Safety Commission (NOHSC) Exposure Standards: Substance TWA STEL Notice ppm mg/m <sup>3</sup> ppm mg/m <sup>3</sup> Acetic acid 10 25 15 37 - New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards: Substance TWA STEL Notice ppm mg/m <sup>3</sup> ppm mg/m <sup>3</sup> Acetic acid 10 25 15 37 -
Biological Limit Values	No biological limit allocated.
Other Exposure Information	TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week. STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight- hour workday.
Engineering Controls	An effective ventilation system, such as a local exhaust ventilation system, drawing vapours, mists and fumes away from workers' breathing zone, should be used.
Respiratory Protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
Eye Protection	Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
Hand Protection	Wear gloves of impervious material e.g. laminated film. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
Body Protection	Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist.
	9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance	Clear, colourless liquid, with a very strong, sharp vinegar odour.

Melting Point	16.6°C
<b>Boiling Point</b>	118.1°C
Solubility in Water	Soluble
Solubility in Organic Solvents	<b>c</b> Soluble in alcohol, glycerol and ether. Soluble in most organic solvents.
Specific Gravity	1.051
pH Value	2.9 (0.1M aq. solution)
Vapour Pressure	1.5 kPa at 20°C
Vapour Density (Air=1)	2.1 (Air = 1)
Evaporation Rate	0.97, (n-Butyl acetate=1)
Viscosity	1.22 cP at 20°C
Volatile Componen	t 100%
Flash Point	39°C (Closed Cup)
Flammability	Flammable liquid.
Auto-Ignition Temperature	463°C
Flammable Limits - Lower	5.3%
Flammable Limits - Upper	16.6 %
	10. STABILITY AND REACTIVITY
Chemical Stability	Stable under normal conditions of storage and handling.
Incompatible Materials	Incompatible with most metals, may produce hydrogen. May react violently with amines, strong alkalis and strong oxidising agents such as hydrogen peroxide, nitric acid, perchloric acid or chromium trioxide.
Hazardous	Carbon monoxide and carbon dioxide.

# Decomposition Products

# Hazardous

Polymerization Will not occur.

### **11. TOXICOLOGICAL INFORMATION**

	13. DISPOSAL CONSIDERATIONS
Environment Protection	Do not allow product to enter drains, waterways or sewers.
Bioaccumulative Potential	Not available
Mobility	Not available
Persistence / Degradability	Not available
Ecotoxicity	Not available
	12. ECOLOGICAL INFORMATION
Chronic Effects	Chronic exposure to liquid, vapour or mist may result in harmful corrosive effects to skin and respiratory system.
Еуе	Corrosive to eyes. Eye contact will cause severe burns. It can cause permanent eye damage and blindness.
Skin	Corrosive to skin. Skin contact will cause redness, irritation and severe burns with resultant tissue destruction.
Ingestion	Ingestion of this product will cause burns to the mouth, throat and stomach, resulting in extensive tissue damage and severe pain.
Inhalation	Inhalation of vapour, mist or fumes can cause severe irritation and chemical burns to the respiratory tract. May cause bronchitis, pneumonia and pulmonary oedema.
Toxicology Information	LD50 (Oral, Rat): 3310 mg/kg LD50 (Dermal, Rabbit): 1060 mg/kg LCL0 (Inhalation, Rat): 16000 ppm/4h

# DisposalThe disposal of the spilled or waste material must be done in accordance with<br/>applicable local and national regulations.

	PORT INFORMATIC	)N
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Tropoport	Australia
Transport Information	Australia:
mormation	This material is a Class 8 Corrosive Substance with subsidiary Class 3 Flammable Liquid according to the Australian Code for the Transport of Dangerous Goods by
	Road and Rail.
	This material is incompatible in a placard load with any of the following:
	- Class 1, Explosives
	- Class 2.1, Flammable Gases, if both the Class 3 and Class 2.1 dangerous goods are
	in bulk
	- Class 2.3, Toxic Gases
	- Class 4.2 Spontaneously Combustible Substances
	- Class 4.3, Dangerous When Wet Substances
	- Class 5.1, Oxidising Agents
	- Class 5.2 - Organic Peroxides
	- Class 6, Toxic Substances (where the Toxic substances are cyanides and the
	corrosives are acids),
	- Class 7, Radioactive Substances
	and are incompatible with food and food packaging in any quantity.
	Note 1: Cyanides must be segregated from Class 8 acids.
	Note 2: Concentrated acids must be segregated from concentrated alkalis (Packing
	Group 1 & 2).
	New Zealand
	This material is classified as a Class 8 - Corrosives and subsidiary Class 3 - Flammable
	Liquids according to NZS 5433:1999 Transport of Dangerous Goods on Land.
	This material must not be loaded in the same freight container or on the same
	vehicle with:
	- (Class 1) Explosives
	- (Class 2.1) Flammable gases
	<ul> <li>- (Class 2.3) Toxic gases</li> <li>- (Class 4.2) Spontaneously combustible substances</li> </ul>
	- (Class 5.1) Oxidising substances
	- (Class 5.2) Organic peroxides
	- (Class 7) Radioactive materials unless specifically exempted
	And are incompatible with food and food packaging in any quantity.
	Note 1: Cyanides (Class 6.1) must not be loaded in the same freight container or on
	the same vehicle with acids (Class 8).
	Note 2: Strong acids must not be loaded in the same freight container or on the
	same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be
	considered as strong.
	Must not be loaded with in the same freight container; and on the same vehicle
	must be separated horizontally by at least 3 metres unless all but one are packed in
	separate freight containers with:
	- (Class 4.2) Spontaneously combustible substances
	- (Class 4.3) Dangerous when wet substances
	Goods of packing group II or III may be loaded in the same freight container or on
	the same vehicle if transported in segregation devices with:

	<ul> <li>- (Class 4.3) Dangerous when wet substances</li> <li>- (Class 5.1) Oxidising substances</li> <li>- (Class 5.2) Organic peroxides</li> <li>And are incompatible with food and food packaging in any quantity.</li> </ul>
U.N. Number	2789
Proper Shipping Name	ACETIC ACID, GLACIAL
DG Class	8
Sub.Risk	3
Hazchem Code	2P
Packaging Method	3.8.8,RT1,RT7
Packing Group	II
EPG Number	8B1
IERG Number	19
	15. REGULATORY INFORMATION
Regulatory Information	Australia: Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Classified as a Scheduled Poison (S6) according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
Poisons Schedule	S6
National and or International Regulatory Information	New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. ERMA Approval Code: HSR000975 (Acetic acid, >80% aqueous solution).
Hazard Category	Corrosive
AICS (Australia)	All constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).
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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