

Version 1.1

Issue date 14/08/2024

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Identifier

Product Name	Acetone
Other Names	Dimethyl ketone, 2-propanone, beta-ketopropane
Proper Shipping Name	Acetone
Other means of Identification	None

Relevant identified uses of the substance or mixture

Relevant identified uses	Industrial solvent
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Details of the supplier of the safety data sheet

Registered company name	ECO Group New Zealand Limited
Address	22 Cherokee Place, Mount Maunganui, New Zealand 3116
Telephone	+64 7 542 4608
Fax	None
Website	www.ecogroupnz.com
Email	info@ecogroupnz.com

Emergency telephone numbers

Association/ Organisation	New Zealand National Poison information centre
Emergency telephone number	0800 764 766
Other emergency telephone numbers	New Zealand emergency services 111

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification:

Hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

Label pictograms

GHS label elements	
Signal Word	DANGER

Hazard statements

HSNO	Hazard Code	GHS Category	Hazard Statement
3.1B	H 225	Category 2	Flammable liquid and vapour
6.1E	H 303	Category 5	May be harmful if swallowed
6.3B	H 336	Category 3	Specific Target Organ Toxicity (Single exposure)
6.4A	H 319	Category 2A	Can cause eye irritation

Precautionary statements prevention

P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from heat/sparks/open flames/hot surfaces
P233	Keep container tightly closed
P240	Ground and bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting and all other equipment
P242	Use only non sparking tools
P243	Take precautionary measures against static discharge
P264	Wash hands thoroughly after handling
P280	Wear protective gloves/eye protection/ face protection

Precautionary statement responses

P101	If medical advice is needed, have product container or label at hand
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off all contaminated clothing immediately. 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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention
P337 + P313	If eye irritation persists: Get medical advice/attention
P370 + P378	In case of fire: Use water or dry powder for extinction

Precautionary statement storage

P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up

Precautionary statement disposal

P501	Disposal should be through a suitably qualified contractor
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

CAS Number	% (weight)	Name
67 – 64 – 1	100	Acetone

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	<ul style="list-style-type: none"> ➤ Wash eyes out immediately with water ➤ If irritation continues seek medical advice ➤ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel ➤ Continue rinsing for 15 minutes, if eye irritation persists seek medical attention
Skin contact	<ul style="list-style-type: none"> ➤ Remove and isolate contaminated clothing and shoes ➤ Flush skin and hair with running water (and soap if available) ➤ Seek medical attention in event of irritation

Inhalation	<ul style="list-style-type: none"> ➤ Remove victim to fresh air and keep warm ➤ Remove and isolate contaminated clothing and shoes and loosen other clothing ➤ Do not use mouth to mouth method if the victim inhaled or ingested the substance ➤ Administer oxygen if breathing is difficult
Ingestion	<ul style="list-style-type: none"> ➤ Immediately give a glass of water to rinse mouth ➤ Contact a poison information centre or seek medical advice, if vomiting occurs lean patient forward or place on left side ➤ Maintain an open airway and prevent aspiration ➤ Never give anything by mouth to an unconscious person
Advice to the doctor	Show this safety data sheet (SDS) to the doctor in attendance. Treat symptomatically. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. *Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media

- Alcohol stable foam
- Dry chemical powder
- BCF (where regulations permit)
- Carbon dioxide
- Water spray or fog – large fires only

Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid contamination with oxidising agents. i.e. nitrates, oxidising acids, chlorine bleaches pool chlorine etc. As ignition may result
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Advice for fire fighters

Fire fighting	<ul style="list-style-type: none"> ➤ Alert fire brigade and tell location and nature of hazard ➤ May be explosive or reactive ➤ Wear breathing apparatus plus protective gloves in the event of a fire ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ Fight the fire from a safe distance and adequate cover ➤ If safe switch off electrical equipment until vapour fire hazard removed ➤ Use water delivered as a fine spray to control the fire and adjacent areas
Fire/explosion hazard	<ul style="list-style-type: none"> ➤ Liquids and vapours are highly flammable ➤ Severe fire hazard when exposed to heat, flame, and or oxidisers ➤ Vapour may travel a considerable distance to source of ignition ➤ Heating may cause expansion or decomposition leading to rupture of containers ➤ Hazardous fumes may occur with decomposition
Hazards from Combustion	➤ Carbon oxides
Flash Point	➤ 17°C
Hazchem Code	➤ -2YE

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor spills	<ul style="list-style-type: none"> ➤ Remove all ignition sources ➤ Clean up spills immediately ➤ Avoid breathing vapours and contact with skin and eyes ➤ Contain and absorb small quantities with absorbent material
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	<ul style="list-style-type: none"> ➤ Wipe up ➤ Collect residue in a flammable waste container
Major spills	<ul style="list-style-type: none"> ➤ Clear area of personnel and move upwind ➤ Alert fire brigade and tell them location and nature of hazard ➤ May be explosive ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ No smoking, naked lights or ignition sources ➤ Increase ventilation
Clean Up Procedures	<ul style="list-style-type: none"> ➤ Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non sparking tools to collect absorbed material. Adhered or collected material should be promptly disposed of in accordance with appropriate laws and regulations
Containment	<ul style="list-style-type: none"> ➤ Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far ahead of large spill for later disposal. *Beware of vapours accumulating to form explosive concentrations. Vapour-suppressing foam may be used to reduce vapours. Water spray may reduce vapour, but may not prevent ignition in closed spaces

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Containers even though empty may contain explosive vapours ➤ Do not drill, grind and weld near containers ➤ Avoid all personal contact including inhalation ➤ Wear protective clothing when risk of exposure occurs ➤ Use in a well ventilated area ➤ Prevent concentration in hollows and sumps ➤ Do not enter confined spaces until atmosphere has been checked ➤ Avoid smoking, naked lights, heat or ignition sources ➤ When handling do not eat, drink or smoke ➤ Vapour may ignite due to pumping or pouring due to static electricity
Other information	<ul style="list-style-type: none"> ➤ Store containers in approved flame proof areas ➤ No smoking, naked lights, heat or ignition sources ➤ DO NOT store in areas where vapour may be trapped ➤ Store away from incompatible materials in a dry cool well ventilated area ➤ Protect containers from damage and check regularly for leaks ➤ Observe manufacturers storage and handling documentation advice

Conditions for safe storage, including any incompatibilities


Suitable container	<ul style="list-style-type: none"> ➤ Packing as supplied by manufacturer ➤ Plastic containers may only used if approved by manufacturer ➤ Check containers are clearly labelled and free from leaks
Storage incompatibility	<ul style="list-style-type: none"> ➤ Avoid heat and ignition sources, store out of direct sunlight

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	For Acetone (CAS No. 67-64-1):- Workplace Exposure Standard: (WES TWA) TWA = 500 ppm (1185 mg/m ³); STEL = 1000 ppm (2375 mg/m ³).
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Exposure controls

	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well designed engineering controls can be highly effective in protecting
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Appropriate engineering controls	<p>workers and will typically be independent of worker interactions to provide this high level protection.</p> <p>The basic controls are:</p> <p>Process controls which involve changing the job activity or process to reduce risk</p> <p>Enclosure and or isolation source control keeping workers physically safe</p> <p>Ventilation that strategically adds and removes air in work environment. Ventilation can remove or dilute an air contaminant if designed properly</p> <p>For flammable liquids and flammable gases, local exhaust or process enclosure ventilation may be required.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ➤ Safety glasses with side shields ➤ Chemical goggles ➤ Contact lenses may pose a special hazard soft contact lenses may absorb and concentrate materials. ➤ Medical personal should be trained and readily available in the event of chemical exposure; they should begin eye irrigation and remove contact lenses as soon as practicable. Lenses should be removed at the first sign of eye irritation
Skin protection	Wear general protective gloves e.g. light weight rubber gloves
Hand / feet protection	As above for hands; wear appropriate footwear for the environment
Body protection	Overalls or PVC Aprons
Other protection	<ul style="list-style-type: none"> ➤ Overalls ➤ PVC Aprons ➤ PVC protective gear ➤ Eyewash facilities ➤ Ensure there is ready access to a safety shower ➤ Non sparking footwear ➤ Respiratory protection when working in case of inadequate ventilation <p>Some PVC protective clothing may not be suitable due to the risk of static electricity</p>

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear Liquid	Upper and Lower explosive limits	2% to 13%
Odour	Solvent smell	Auto ignition temperature	465°C
Odour threshold	Not available	Decomposition temperature	Not available
pH	Not applicable	Viscosity	Not available
Melting point (°C)	Not available	Molecular weight (g/mol)	Not available
Boiling point (°C)	82 - 83°C	Specific Gravity	0.791 g/cm ³ @ 25°C
Flash point (°C)	170°C	Explosive properties	Risk of violent reaction
Boiling point	560°C	Oxidising properties	Not available
Flammability	Highly flammable	Volatile component (% vol)	100%

SECTION 10 – STABILITY AND REACTIVITY

General Information	Stable under normal storage and use conditions
Chemical stability	Stable
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Incompatible materials	Incompatible/reactive with strong oxidisers, acetaldehyde, chlorine, ethylene oxide, acids, isocyanates
Hazardous Decomposition	Carbon oxides
Hazardous Polymerisation	Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

General Information	Acute toxicity: Low degree of toxicity by ingestion; May cause abdominal pain, nausea, vomiting, unconsciousness. Low to moderate degree of toxicity by inhalation.- Skin corrosion/irritation: Contact with skin may result in irritation. The substance may defat the skin, which may cause dryness or cracking.- Eye damage/irritation: Causes serious eye irritation, redness.- Respiratory/skin sensitisation: This material has been classified as not a respiratory sensitiser. This material has been classified as not a skin sensitiser.- Germ cell mutagenicity: No information available.
Ingestion	Acute toxicity (Oral):- LD50, Mouse: 3000 mg/kg
Other	Acute toxicity (Dermal):- LD50, Rabbit: 12,800 mg/kg
Inhalation	Acute toxicity (Inhalation):- LC50, Rat: 16,000 ppm (8 h)

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L Long-term aquatic hazard: This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4. Avoid contamination of drains and waterways
Persistence/Degradability	Readily Biodegradable
Bioaccumulation Potential	Not expected to bioaccumulate
Environmental Impact	No information available


SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none"> ➤ Do not allow wash water from cleaning or process equipment to enter drains ➤ It may be necessary to collect all wash water for treatment before disposal ➤ In all case disposal to sewer may be subject to local laws and regulations and these should be considered first ➤ If in doubt contact the responsible authority ➤ Contact manufacturer for recycling options or consult local or regional waste management authority for disposal ➤ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed
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SECTION 14 – TRANSPORT INFORMATION

Labels required

	
Marine Pollutant	NO
HAZCHEM	2YE

Land transport (ADG)

UN Number	1090
Packing group	II
UN proper shipping name	Acetone
Environmental hazard	Not applicable
Transport hazard classes	Class 3 flammable liquids
Special precautions for user	No data available

Air transport (ICAO-IATA / DGR)

UN Number	1090
Packing group	II
UN proper shipping name	Acetone
Environmental hazard	Not applicable
Transport hazard classes	Class 3 flammable liquids
Special precautions for user	No data available

Sea transport (IMDG / GGVSee)

UN Number	1090
Packing group	II
UN proper shipping name	Acetone
Environmental hazard	Not applicable
Transport hazard classes	Class 3 flammable liquids
Special precautions for user	No data available
Marine Pollutant	No

Transport in bulk according to Annex II of Marpol and the IBC Code - Not applicable

SECTION 15 – REGULATORY INFORMATION

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

GHS Codes	3.1B, 6.1E (oral), 6.3A, 6.4A
National Inventory	Status
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes
	All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Hazardous Substances and New Organisms Amendment Act 2015
Approval Code	HSR001070
Certified Handler	Not required

Location Certificate	100L (>5L) 250L (<5L) <50L open
Signage	250L (3.1B)
Emergency response plan	1000L (3.1B)
Secondary Containment	1000L (3.1B)

SECTION 16 – OTHER INFORMATION

While ECO Group New Zealand Limited in good faith has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Eco Group New Zealand Limited accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

New Zealand National Poison Information Centre: 0800 764 766
New Zealand Emergency Services: 111
ECO Group New Zealand Limited: +64 7 542 4608

Definitions and abbreviations

PC – TWA	Permissible concentration – time weighted average
PC – STEL	Permissible concentration – short term exposure limit
IARC	International agency for research on cancer
ACGIH	American conference of Government Industrial Hygiene
STEL	Short term exposure limit
TEEL	Temporary emergency exposure limit
IDLH	Immediate dangerous to life or health concentration
OSF	Odour safety factor
NOAEL	No observed adverse effect level
LOAEL	Lowest observed adverse effect level
TLV	Threshold limit value
LOD	Limit of detection
OTV	Odour threshold value
BCF	BioConcentration factors

END OF SDS