

SAFETY DATA SHEET

Issue Date August 2017

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier 2-Propanone; Dimethyl Ketone; Ketone; Ketone Propane
Product Name Acetone

Description Solvents, raw material for cleaning agents and disinfectants, for washing and cleaning agents, raw material for cosmetic agents, raw material for pharmaceutical products, raw material for printing inks and printing ink additives, raw material for adhesives and binders, raw material for welding and soldering aids, paint related material.

Other means of identification

UN Number 1090

Recommended use of the chemical and restrictions on use
Recommended Use Refer Description above

Details of the supplier of the safety data sheet

Manufacturer
Norski Holdings Ltd
10 Northpoint Street
Pimmerton
Wellington 5247
New Zealand

For further information, please contact

Contact Point

Norski Holdings Ltd
+64 (04) 233 6184

E-mail address

Enquiries@norski.co.nz

Emergency telephone number

Emergency Telephone
National Poisons Center Number

0800 764 766

Section 2: HAZARD(S) IDENTIFICATION

Regulatory information

Product is classified as hazardous according to Schedules 1 to 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 of the HSNO Act, 1996.

EPA New Zealand HSNO approval code or group standard

3.1B: Highly flammable ; 6.1E: Acute Toxicity (Oral); 6.1E (Aspiration); 6.3B: Skin Irritant; 6.4A: Eye Irritant; 6.9B: Target Organs/Systems (Repeated)

Flammable Liquids - Category 2

Serious Eye Damage/Irritation - Category 2A

Specific Target Organ Toxicity (Single Exposure) - Category 3

Label elements



Signal word

Danger

Signal Word

Danger

Hazard Statements

AUH066

Repeated exposure may cause skin dryness or cracking

H225

Highly flammable liquid and vapour.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

Precautionary Statements

Prevention 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, lighting and all material-handling 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 hands and contaminated body 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

		P312	present and easy to do. Continue rinsing.
		P337 + P313	Call a POISON CENTER or doctor/physician if you feel unwell.
		P370 + P378	If eye irritation persists: Get medical advice/attention.
			In case of fire: Use carbon dioxide (CO ₂), dry chemical or foam for extinction. Alcohol resistant foam is the preferred fire-fighting medium but, if it is not available, normal foam can be used.
Storage		P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
		P405	Store locked up.
Disposal		P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

**Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015**

HSNO Classifications	Physical Hazards	3.1B	Flammable liquid - high hazard
	Health Hazards	6.1E	Substances that are acutely toxic –May be harmful, Aspiration hazard
		6.3B	Substances that are mildly irritating to the skin
		6.4B	Substances that are irritating to the eye

Other hazards

Dangerous Goods Classification

Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS
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Substance

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Acetone	No Data Available	67-64-1	100.0 %

Section 4: FIRST AID MEASURES

Description of first aid measures

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.
Eye	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.
Skin	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Inhaled	Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions aggravated by exposure	No information available on medical conditions aggravated by exposure to this product. Chronic: Long Term Effects: Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver and other organs. Exposure to acetone in the work setting may add to any health effects caused by intake of alcoholic drinks, particularly in regard to narcotic and liver effects.

Emergency telephone number Poisons Information Centre, New Zealand:
0800 764 766

Inhalation Remove to fresh air. IF exposed or concerned:
Get medical advice/attention

Skin contact Wash off immediately with soap and plenty of
water while removing all contaminated clothes
and shoes. Treat symptomatically. In case of

accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water Never give anything by mouth to an unconscious person. Call a doctor

Self-protection of the first aider

Remove all sources of Ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation

Most important symptoms and effects, both acute and delayed symptoms

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Indication of any immediate treatment needed

Treat symptomatically

Section 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam is the preferred fire fighting medium but, if it is not available, fine water spray or water fog can be used.

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable extinguishing media

Do not use water jetstream

Fire and Explosion Hazard Highly flammable liquid. May form flammable vapour mixtures with air. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. Vapour may travel a considerable distance to source of ignition and flash back.



Hazardous Products of Combustion	Highly flammable liquid. Heating can cause expansion or decomposition leading to violent rupture of containers. Incompatible with Strong oxidizing agents, halogenated compounds and sources of ignition. Burning can produce carbon dioxide and water, incomplete combustion can produce carbon monoxide.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Flash Point	-17 °C
Lower Explosion Limit	2.15%
Upper Explosion Limit	13 %
Auto Ignition Temperature	465 °C
Hazchem Code	•2YE

Special protective actions for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take action to prevent static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders

Use personal protection recommended in Section 8.

General Response Procedure	Shut off all possible sources of ignition. Personnel involved in the clean up should wear full protective clothing as listed in section 8. Avoid accidents, clean up immediately. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Stop leak if safe to do so. Prevent liquid entering sewers, basements and work pits; vapor may create
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	explosive atmosphere. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment. Use water spray to reduce vapors. No smoking, flames, or flares in hazard area.
Clean Up Procedures	If possible, the spilled liquid should be pumped or otherwise transferred to a waste container. Residual liquid should be absorbed using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated collect material, transfer to suitable, labelled, dry chemical-waste containers and dispose of promptly as hazardous waste.
Containment	Stop leak if safe to do so
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material).

Precautions to prevent secondary hazards

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE
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Handling	<p>Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures.</p> <p>Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Keep away from heat and sources of ignition. Intrinsically safe equipment (e.g explosion-proof equipment) only must be used in areas where this chemical is being used. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard. Containers must be earthed to avoid generation of static charges when agitating or transferring product. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Do not eat, drink or smoke in areas of use or storage.</p>
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Storage	Store in a cool, dry, well-ventilated, fire-proof area. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Ground and bond storage containers. Store away from incompatible materials as listed in section 10. Protect from heat, and sources of ignition. Do not eat, drink or smoke in areas of use or storage. This product has a UN Classification of 1090 and a Dangerous Goods Class 3 (flammable) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Container type/package must comply with all applicable local legislation. Store in original packaging as approved by manufacturer

Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work. Wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store separately.

Incompatible materials

None known based on information supplied.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

General	The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC); ACETONE (CAS 67-64-1): TWA = 500ppm (1185mg/m ³) STEL = 1000ppm (2375mg/m ³) NOTE: The exposure value at the TWA is the average airborne concentration of a particular
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substance when calculated over a normal 8 hour working day for a 5 day working week.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Exposure Limits

No Data Available

Biological occupational exposure limits

Not applicable

Biological Limits

No information available on biological limit values for this product.

Engineering Measures

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use a flame proof exhaust ventilation system.

Personal Protection Equipment

RESPIRATOR: Wear a respirator with suitable Type 'A' filter for organic gases and vapours if engineering controls are inadequate (AS1715/1716).

EYES: Chemical goggles to prevent splashing in the eyes (AS1336/1337).

HANDS: Neoprene or latex gloves (AS2161).

Clothing

Chemical-resistant coveralls and safety footwear (AS3765/2210).

Work

Hygienic Practices, Always wash hands before smoking, eating, drinking or using the toilet.

Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES
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Information on basic physical and chemical properties

Appearance	Liquid
Odour	Ketone Odour
Colour pH	Colourless, clear
Vapour Pressure	No Data Available
Relative Vapour Density	180 mmHg (20°C) torr (@ 20 °C)
Boiling Point	2.0 Air = 1 55 - 57 °C
Melting Point	-95
Freezing Point	-95 °C
Solubility	Soluble 25°C
Specific Gravity	0.791
Flash Point	-17 °C
Auto Ignition Temp	465 °C
Evaporation Rate	6 n-Butyl acetate = 1
Bulk Density	No Data Available No Data
Corrosion Rate	Available No Data Available
Decomposition Temperature	No Data Available No Data
Density	Available
Specific Heat	No Data Available No Data
Molecular Weight	Available
Net Propellant Weight	-0.24
Octanol Water Coefficient	No Data Available No Data
Particle Size	Available No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	0.303 cPs (@ 25 °C) No Data
Vapour Temperature	Available No Data Available
Viscosity	No Data Available
Volatile Percent	Product is a liquid.
VOC Volume	No Data Available
Additional Characteristics	
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	
Flame Propagation or Burning Rate of Solid Materials	

Section 10: STABILITY AND REACTIVITY

Chemical Stability	Product is stable under directed conditions of use, storage and temperature. Highly flammable liquid.
Conditions to Avoid	Avoid exposure to heat, sources of ignition, open flame and build-up of static electricity.
Materials to Avoid	Incompatible with strong oxidising agents , strong alkalis , bromine , and mineral acids .
Hazardous Decomposition Products	Burning can produce carbon dioxide and water, incomplete combustion can produce Oxides of carbon.
Hazardous Polymerisation	Hazardous polymerization will not occur.

Section 11: TOXICOLOGICAL INFORMATION

General Information	<p>Oral LD50 (rat): 5800-8400 mg/kg Dermal LD50 (rabbit): 20000 mg/kg Inhalation LC50 (rat): 32000 ppm/4 hr Skin corrosion/irritation: Slight irritant (rabbit). Serious eye damage/irritation: Moderate irritant (rabbit).</p>
Eye Irritant	Chronic effects: A study of 800 workers occupationally exposed to acetone vapours (600-2150 ppm) over an 18 year period revealed no significant adverse effects in exposed compared with unexposed workers.
Ingestion	Vapour may irritate the eyes. Liquid and mists may severely irritate or damage the eyes.
Inhalation	Swallowing can result in nausea, vomiting and central nervous system depression.
Skin Irritant	<p>If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).</p> <p>Material may be irritant to the mucous membranes of the respiratory tract (airways). Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgement and if exposure is prolonged, unconsciousness.</p> <p>Contact with skin may result in irritation. Will have a degreasing action on the skin.</p>
Carcinogen Category	Repeated or prolonged skin contact may lead to irritant contact dermatitis. No Data Available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	Fish Oncorhynchus mykiss LC50/96hr: 5540mg/L Fish Bluegill sunfish LC50/96hr: 8300mg/L Fish Pimephales promelas LC50/96hr: 8120mg/L Daphnia Magna EC50/24hr: 10mg/L Selenastrum Caprocornutum EC50/96hr: >100mg/L
Persistence/Degradability	Product is volatile and biodegradable.
Mobility	When released into the soil, this material will mobile and may contaminate groundwater.
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation	Not expected to bioaccumulate significantly.
Potential	
Environmental Impact	No Data Available

Section 13: DISPOSAL CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations.

All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS with Class 3, UN1090.

Special Precautions for Land Fill Contact a specialist disposal company or the local waste regulator for advice.

Empty containers must be decontaminated by rinsing with water. Non-returnable containers should be de-gassed prior to disposal. Waste containers can either be reused for the same material or disposed in accordance with government regulation. Suitable for incineration by approved agent under controlled conditions if permitted by local authorities, otherwise disposal must be in accordance with local waste and environmental authorities.

Section 14: TRANSPORT INFORMATION

Road transport

Proper Shipping Name	ACETONE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	14 Liquids - Highly Flammable
UN Number	1090
Hazchem	•2YE
Pack Group	II
Special Provision	No Data Available

Section 15: REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule	5
Environmental Protection Authority (New Zealand) Hazardous Substances and New Organisms Amendment Act 2015	
Approval Code	HSR001070

Section 16: ANY OTHER RELEVANT INFORMATION

Revision Date **October 2017**

Revision Note **New Format**

Key or legend to abbreviations and acronyms used in the data safety sheet

< Less Than
 > Greater Than
 AICS Australian Inventory of Chemical
 Substances atm Atmosphere
 CAS Chemical Abstracts Service (Registry
 Number) cm² Square Centimetres
 CO₂ Carbon Dioxide
 COD Chemical Oxygen
 Demand deg C (°C) Degrees
 Celcius
 EPA (New Zealand) Environmental Protection Authority of
 New Zealand deg F (°F) Degrees Farenheit
 g Grams g/cm³ Grams per
 Cubic Centimetre
 g/l Grams per Litre
 HSNO Hazardous Substance and New
 Organism IDLH Immediately Dangerous to
 Life and Health immiscible Liquids are
 insoluable in each other.
 inHg Inch of Mercury inH₂O
 Inch of Water K Kelvin kg
 Kilogram kg/m³ Kilograms
 per Cubic Metre
 lb Pound
 LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air
 which causes the death of 50% (one half) of a group of test animals. The material is
 inhaled over a set period of time, usually 1 or 4 hours. LD₅₀ LD stands for Lethal
 Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of
 50% (one half) of a group of test animals.
 ltr or L Litre



m³ Cubic Metre
mbar
Millibar
mg Milligram
mg/24H Milligrams per 24
Hours
mg/kg Milligrams per
Kilogram
mg/m³ Milligrams
per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount
of either component present.
mm Millimetre
mmH₂O Millimetres of Water
mPa.s Millipascals per
Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Health and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm
Parts per Million
ppm/2h Parts per
Million per 2 Hours
ppm/6h Parts per
Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure
Limit
TLV Threshold Limit
Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24
Hours
UN United Nations
wt Weight

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End of Safety Data Shee