

# Hazardous Substance, NON - Dangerous Goods

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Acetone

Recommended use: Solvent, Clean and dry parts of equipment, Reagent

**Supplier:** LIQUIMIX PTY LTD **ABN**: 32 062 887 585

Street Address: 1 / 29 Collinsvale Street

Rocklea Qld 4106

Australia

**Telephone:** (07) 3277 6655 **Facsimile:** (07) 3009 0558

Emergency telephone number: Australia: 1 800 786 152 (ALL HOURS) NZ: 0800 767 376

# 2. HAZARDS IDENTIFICATION

Hazardous according to criteria of NOHSC/ASCC

Dangerous According to the Australian Code for the Transport of Dangerous Goods.

Classified as Dangerous Goods According to NZS 5433:1999

#### FLAMMABLE IRRITANT

Risk Phrases R11 Highly flammable

R36 Irritating to eyes

R66 Repeated exposure may cause skin dryness and cracking

R67 Vapours may cause drowsiness and dizziness

Safety Phrases S2 Keep out of reach of children

S9 Keep container in a well-ventilated place

S16 Keep away from sources of ignition - No smoking

S26 In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

HSNO Hazard Classification 3. 1B 6.1E 6.3B 6.4A

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients: Chemical Entity CAS Number Proportions

ACETONE (67-64-1) 100(%)

# 4. FIRST AID MEASURES

# In case of eye contact:

Immediately flush eyes with plenty of lukewarm, gently flowing water holding eyelids open. If irritation persists, seek medical attention.

In case of skin contact:

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Remove contaminated clothing. Immediately wash skin with soap plenty of water. If irritation persists, seek medical attention.

#### If inhaled:

Remove from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult give oxygen. Seek medical attention.

#### Ingestion:

DO NOT induce vomiting. Have victim drink 240-300ml of water, if conscious. If vomiting occurs naturally, rinse mouth and repeat administration of water. Seek medical attention.

#### Advice to Doctor:

Treatment based on judgement of the physician in response to reactions of the patient. NOTE: For advice in an emergency, contact a Poisons Information Centre (Australia 13 1126 or New Zealand 0800 764 766).

# Aggravated medical conditions caused by exposure:

Target Organs: Central nervous system, respiratory system, eyes, skin. May damage the liver and kidneys.

# 5. FIRE / EXPLOSION HAZARDS

#### Product is a highly flammable liquid.

Extinguishing Media: Includes water spray, alcohol-resistant foam, dry chemical and carbon

dioxide. Use water spray to cool fire-exposed containers.

Combustible Liquid: Vapours are heavier than air and may travel to an ignition source and flash

back. Vapours can spread along ground and collect in low or confined areas.

Incompatible with oxidizing agents, acids, reducing agents, bases,

halogenated compounds, hexachloromelamine, sulphur dichloride, potassium

tert-butoxide and sources of ignition.

Flash Point: Closed Cup -20

**Products of Combustion:** During a fire, irritating and highly toxic gases may be generated by

thermal decomposition or combustion including carbon monoxide and carbon

dioxide.

#### **Protective Precautions & Equipment for Fire Fighters:**

Positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves) should be worn. Clear fire area of all non-emergency personnel. Stay up wind. Keep out of low areas where gases or fumes can accumulate.

Do not use direct water stream. Eliminate ignition sources.

Hazchem Code: 2(Y) E

# **6. ACCIDENTAL RELEASE MEASURES**

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#### **Emergency Procedures:**

Personnel should wear full protective clothing. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. 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.

#### Methods and Materials for Containment and Clean Up

Soak up spilled product 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.

# 7. HANDLING AND STORAGE

**Precautions**: Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours.

**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. Store away from incompatible materials. Protect from direct sunlight and static charges.

UN Classification: 1090 Dangerous Goods: Class 3

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** 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 explosion proof ventilation equipment.

**Personal Protection:** RESPIRATOR: Wear an approved respirator with suitable 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: Butyl rubber gloves break through time 4hr (AS2161) CLOTHING: Flame-retardant coveralls and anti-static footwear

(AS3765/2210)

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Colour: Clear, colourless liquid

Odour: Characteristic pungent sweetish odour

Formula: CH3COCH3

Vapour Pressure: 307.974hPa (25°C) mm Hg (1 atmosphere)

Vapour Density 2.0
Boiling Point: 56.2°C
Melting Point: -95.3°C

Solubility: Soluble in water, alcohol, ether, chloroform and most oils.

Specific Gravity: 0.79g/cm3 (Water = 1)
Flash Point: Closed Cup -20

pH: 5-6 (395g/L H2O (20°C)

Lower Explosion Limit: 2.6% (as percentage volume in air)
Upper Explosion Limit: 12.8% (as percentage volume in air)

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Ignition Temperature 465

Specific Heat Value Not applicable Volatile Organic Not applicable

**Evaporation Rate** 

VOC Content 5.6 Viscosity 0.4mm2/s Percent Volatile 100%

Saturated Vapour Concentration 533g/m3 (20°C) Additional Characteristics Not applicable

Additional Information Molecular Weight: 58.08 Refractive Index: 1.3591 Dipole Moment:

2.7 Debye (20°C) Heat of Evaporation: 521kJ/Kg (56°C)

# 10. STABILITY AND REACTIVITY

**Chemical Stability** Product is stable under directed conditions of use, storage and temperature.

Flammable liquid.

**Conditions to Avoid** Avoid excessive heat, direct sunlight, moisture, freezing, static discharges

and high temperatures.

Incompatible Materials Incompatible with oxidizing agents, acids, reducing agents, bases,

halogenated compounds, hexachloromelamine, sulphur dichloride, potassium

tert-butoxide and sources of ignition.

Hazardous Decomposition Products During a fire, irritating and highly toxic gases may be

generated by thermal decomposition or combustion including carbon

monoxide and carbon dioxide.

**Hazardous Reactions** Hazardous polymerization will not occur.

# 11. TOXICOLOGICAL INFORMATION

**Toxicity Data**: Oral LD50 Rat: 5800mg/Kg Inhale LC50 Rat: >20mg/L (4hr) Skin LD50 Rabbit: 20000mg/Kg Skin Irritation: Moderately irritating to rabbit skin. Eye Irritation: Irritating to rabbit eyes.

Health Effects - Acute

**Skin:** May cause mild skin irritation. Will have a degreasing action on the skin. Prolonged/repeated skin contact may cause skin dryness, cracking and chronic dermatitis.

**Eyes:** Irritating to eyes. Risk of corneal clouding.

**Ingestion**: Moderately toxic by ingestion. May cause gastric irritation, gastro-intestinal complaints, headache, salivation, nausea, vomiting, dizziness, narcosis and coma.

**Inhalation:** Moderately toxic by inhalation. May cause headaches, drowsiness, dizziness, salivation, nausea, vomiting and coma. Irritating to mucous membranes and respiratory tract. Narcotic in high concentrations.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available **Biodegradability:** 89% 5 days 100% 21 days

**Environmental Fate:** Do NOT let product reach waterways, drains and sewers.

# 13. DISPOSAL CONSIDERATIONS

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#### REFER TO STATE LAND WASTE MANAGEMENT AUTHORITY.

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# 14. TRANSPORT INFORMATION

# **Land Transport**

UN Number: 1090 Shipping Name: ACETONE

Flammable Irritant

**Dangerous Goods** 

Class: 3 Flammable Liquid

Subsidiary Risk Not applicable

Pack Group: II Hazchem Code 2 (Y) E

# **Sea Transport**

UN Number 1090 Shipping Name ACETONE

Flammable Irritant

**Dangerous Goods** 

Class: 3 Flammable Liquid Subsidiary Risk Not applicable

Pack Group: II Hazchem Code 2YE

# 15. REGULATORY INFORMATION

Classified as hazardous according to The Australian Safety and Compensation Council (ASSCC) and Annex I European Directive 67/548/EEC. EINECS No: 200-662-2 Acetone

Poisons Schedule 5 EPG 14

AICS Name 2-PROPANONE
NZ Toxic Substance No data available
HSNO Hazard Classification 3.1B 6.1E 6.3B 6.4A

ERMA Approval Code HSR001070

# **16. OTHER INFORMATION**

Literature References: No data available

Sources for Data No data available

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