

HiChem Paint Technologies Pty.Ltd.

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**IDENTIFICATION of the SUBSTANCE(S) and COMPOSITION**

Product Name	CYCLOHEXANONE	Code	
Product Use	Use as a solvent.		
Ingredients	Name	CAS Number	Proportion w/w
	Cyclohexanone	108 – 94 – 1	95 – 100 %

HAZARD IDENTIFICATION

The product is classified both as **Dangerous Goods and Hazardous Substance** in accordance to ASCC

Risk Phrases R

- 10 Flammable Liquid
 20/21/22 Harmful by inhalation, in contact with the skin and if swallowed
 36/38 Irritating to the eyes and skin.
 40 Limited evidence of a carcinogenic effect.
 52/53 Harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.
 65/66/67 Harmful. May cause lung damage if swallowed. Repeated or prolonged exposure may cause skin dryness and cracking. Vapours may cause headaches, drowsiness and dizziness.

Safety Phrases S

- 2 Keep out of reach of children.
 7/9 Keep containers tightly closed when not in use and also in a well ventilated area.
 15 Keep away from heat.
 16 Keep away from sources of ignition.
 20/21 When using, do not eat, drink or smoke.
 23.2 Do not breathe vapours.
 24/25 Avoid skin contact and with the eyes.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 27 Take off immediately all contaminated clothing.
 28.1 In contact with the skin, wash immediately soap and plenty of water.
 36/37/38/39 The wearing of an Organic Vapour Respirator, Safety Glasses fitted with side – shields, Viton or PVC gloves, enclosed footwear, high temperature and anti – static clothing.
 45 In case of accident, or if you feel unwell, seek medical advice immediately. Show the label where possible.
 62 If swallowed, do not induce vomiting: seek medical advice immediately. Show the label where possible.

ADG Classification CYCLOHEXANONE, UN 1915, Class 3, HAZCHEM 3[**Y**], Packing Group III.
SUSDP Not classified as a Schedule poison.

FIRST AID MEASURES

Inhalation	If the applicator feels drowsy, dizzy, tired or experiencing headaches, remove the victim to the fresh air. Keep the victim warm and quiet until all symptoms subside.
Ingestion	If swallowed, and only if the person is conscious, give clean water to drink. If any symptoms occur, DO NOT induce vomiting; seek URGENT medical attention if frothing from the mouth occurs.
Eyes	If splashed into eyes, hold eyes open, irrigate copiously with clean water for at least 15 minutes. Seek immediate medical attention if any irritation occurs.
Skin	If skin contact occurs, remove contaminated clothing, and wash thoroughly with soap and plenty of water. Seek medical attention if any irritation occurs.
First Aid Facilities	Clean Water Supply, soap or skin cleaner, barrier cream, emergency showers and eye wash stations.
Advice to Doctor	If poisoning occurs, consult with the Poisons Information Centre {Telephone 13 11 26 }. Have a copy of this material safety data sheet or label available. Treat symptomatically as systems may be delayed for several hours after exposure.

**FIRE FIGHTING MEASURES**

Extinguishing Media and Requirements	Carbon Dioxide {CO ₂ }, alcohol resistant foam, dry chemical or water spray. DO NOT use water jets. Bund area with sand to prevent run – off entering waterways and drains.
Fire Fighting Procedures & Precautions	Fire – fighters must wear Chemical Splash Suit with attached Self – Contained Breathing Apparatus and gloves. Evacuate all non fire–fighting personnel away from the area. Turn off all electricity and power supplies. Keep containers cool with water spray or water to prevent rupture or burning. Move away all containers and equipment from the direction of the fire, if safe to do so. Keep upwind.
Flammability	Flammable Liquid. Flash Point = 43 °C
Hazardous Decomposition Products	On heating, containers may rupture and explode: contents may burn rapidly forming toxic gases including carbon monoxide

**ACCIDENTAL RELEASE MEASURES**

Spills and Leaks	Contain all spills and leaks. Avoid contamination with spilt material on surfaces. Remove all sources of ignition and NO SMOKING . Wear the recommended full body impervious clothing, gloves and breathing apparatus as per AS– NZ 1715/16. Keep upwind. Absorb all spilt contents onto sand or earth.
Disposal	Collect all residues into labelled and sealed containers for disposal via special waste collection services as per local Statutory Authority requirements.
Other Precautions	Avoid contaminating waterways, drains, water courses and sewage.



HANDLING and STORAGE

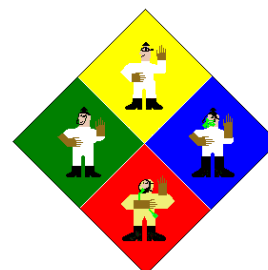
Handling	Keep out of reach of children. Avoid unnecessary contact with the material. After use before eating, drinking or smoking wash all exposed skin with soap and water.
Storage	Containers must be clearly labelled, rigid and strong. Store upright in a cool, dry, well ventilated area from heat, ignition sources and direct sunlight e.g. Flammable Goods Store as per AS 1940 requirements.

EXPOSURE CONTROLS

Exposure Standards MAK	Cyclohexanone = 100 mg/m ³ .
Exposure Standards STEL	Cyclohexanone = Not Known
Engineering Controls	The use of local exhaust ventilation equipment is required. All ventilation equipment must be fitted with flame and explosion proof electrical fittings.

PERSONAL PROTECTION

Inhalation AS -NZS 1715/16	The wearing of an Organic Vapour Respirator should be worn during the application period.
Eye AS -NZS 1337	The wearing of safety glasses fitted with side shields should be worn at all times during the application period. Do not wear contact lenses.
Gloves AS -NZS 2161	The wearing of Viton or PVC elbow length gloves should be worn at all times during the application period..
Footwear AS -NZS 2210	The wearing of enclosed footwear should be worn during the application period.
Clothing AS -NZS 2919	The wearing of anti-static clothing made on natural or synthetic high temperature fibre should be worn during the application period.
Hearing AS -NZS 1270	Not Required.
Other Requirements	Avoid contact with eyes and skin. Avoid inhaling vapours at all times.

**PHYSICAL – CHEMICAL PROPERTIES**

Appearance	A colourless liquid with a sweet odour.	
pH	Not required.	
Vapour Pressure (Butyl Acetate = 1)	Less than 1.0	
Boiling Point °C	145 – 155 °C {literature value}	
Density	0.95 {literature value}	
Solubility in water	Immiscible	
Flash Point °C	35° C {literature value}	
Flammability Limits	Lower Explosive Limit = 1.1 %	Upper Explosive Limit = 8.1
Auto Ignition °C	420 °C {literature value}	
Volatile Components	Cyclohexanone	

STABILITY and REACTIVITY

Chemical Stability	Stable under normal conditions of use.
Conditions to avoid	Avoid contact with heat and all ignition sources.
Hazardous decomposition products	On heating, containers may rupture and explode: contents may burn rapidly forming toxic gases including carbon monoxide.
Incompatible materials	Incompatible with strong oxidizing agents
Hazardous Reactions	Will not polymerize.

TOXICOLOGICAL INFORMATION

Health Effects	<i>Cyclohexanone</i>
Inhalation LC ₅₀ rat	>20 mgm/L
Dermal LD ₅₀ rabbit	>2000 mgm/kg
Oral LD ₅₀ rat	>2000 mgm/kg
Acute Oral Toxicity rat	Low toxicity. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity rabbit	Low toxicity
Acute Inhalation Toxicity rat	Low toxicity. High concentrations may cause central nervous system depression resulting in headaches, dizziness, nausea, loss of co-ordination and impaired judgement: continued inhalation may result in unconsciousness and/or death.

OTHER TOXICOLOGICAL INFORMATION**Health Effects**

Inhalation	Other symptoms may cause dizziness, nausea, coughing, lack of co – ordination and impair judgement.
Ingestion	Large quantities may cause nausea and vomiting.
Eyes	Irritating to the eyes, including burning sensation, redness, swelling and/or blurred vision.
Skin	May have degreasing effect on the skin may result in contact dermatitis.
Carcinogenicity	Limited evidence of a carcinogenic effect.
Mutagenicity	Not mutagenic in animal studies Does not impair fertility.

ECOLOGICAL INFORMATION

Environment	Harmful to aquatic organisms (R52). May cause long – term adverse effects in the aquatic environment (R53).
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DISPOSAL CONSIDERATIONS

Collect all residues and placed into labelled and sealed containers. Do not incinerate empty containers after use. Dampen all unwanted cloths and rags in water prior to disposal. Do not recycle contents or spent containers. Crush all small empty containers. Larger containers and drums may be sent to an approved drum recycler. Ensure all contents do not pollute waterways, drains and other water courses.



TRANSPORT INFORMATION

UN number	1915		
Proper Shipping Name	CYCLOHEXANONE,.		
Class	3	Subsidiary Risk	Not Required
Packing Group	III		
Emergency Procedures	3305	Initial Emergency Response Guide	15
HAZCHEM	3[<input checked="" type="checkbox"/>]		
IMDG	Not Known		

**REGULATORY INFORMATION**

SUSDP Not Classified as a Schedule poison.

OTHER INFORMATION

Emergency Contact **Poisons Information Centre 13 11 26** **HiChem Paint Technologies (03) 9796 3400**

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