

Hwatsi Chemical Private Limited urges the customers receiving this Material Safety Data Sheet (MSDS) to study it carefully to become aware of hazards, if any, of the product involved. In the interest of Safety, you should notify your employee, agent & contractors about the information on this sheet, furnish a copy of each of your customers for the product, and request your customers to inform their employees and customers as well.

1. CHEMICAL IDENTITY			
Chemical name	Methylene Chloride		
Synonym	Methylene dichloride, Refrigerant-30, Freon-30, R-30, DCM.		
Chemical Formula	CH <sub>2</sub> Cl <sub>2</sub>		
Chemical Classification	Organic compound		
Molecular weight	84.93g/mole		
2. COMPOSITION / INFORMATION ON INGREDIENTS			
Name	CAS	% by weight	
Methylene chloride	75-09-2	100	
3. PHYSICAL / CHEMICAL DATA			
Boiling Point @ 760mm Hg	39.75°C (103.5°F)	Vapour Pressure	46.5 kPa (@ 20°C)
Melting Point	-96.7°C (-142.1°F)	Solubility in water	Partially soluble in cold water
Vapour Density	2.93 (Air = 1)	Appearance	Colorless liquid
Specific Gravity	1.33( water=1)	Odour	Sweet
pH	Not available	Other	Easily soluble in methanol, diethyl ether, n-octanol, acetone.
Physical State	Liquid		
4. FIRE / EXPLOSION HAZARD DATA			
Flammability	Combustible at high temperature.	Flash Point	NA, but can form flammable vapor- air mixtures above ~100 °C
Auto ignition temperature	556°C( 1032.8°F)	LEL	12%
Explosion sensitivity to impact	Not applicable.	UEL	19%
Explosion sensitivity to static electricity	Not applicable.		
Hazardous Combustion products	CO, CO <sub>2</sub> and Halogenated comp.		
Hazardous Polymerization	Has not been reported.		
Pyrophoric material	No	Corrosive	No
Organic Peroxide	No	Oxidizer	No
Explosive material	No	Other	-
NFPA Rating (estimated)	Health : 2 Flammability : 1 Reactivity : 0 Special : 0		

### 5. STABILITY & REACTIVITY DATA

Chemical Stability	Stable under normal temperatures and pressures.
Incompatibility with other Material	Not available
Reactivity	Not available
Hazardous reaction / decomposition products.	Will not occur.

### 6. HEALTH HAZARD DATA

Routes of Entry	Inhalation, ingestion, eyes and skin.
Effects of exposure / symptoms	<p><b>Eye:</b> May cause eye irritation. May cause chemical conjunctivitis.</p> <p><b>Skin:</b> May cause irritation and permeator.</p> <p><b>Ingestion:</b> May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated. Ingestion of large amounts may cause CNS depression.</p> <p><b>Inhalation:</b> The toxicological properties of this substance have not been fully investigated. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.</p> <p><b>Chronic:</b> Effects may be delayed can produce target organ damage.</p>

### 7. TOXICOLOGICAL INFORMATION

LD 50 / LC 50	Acute oral 1600 mg/kg (Rat) / Acute vapor 52000 1hour (rat)
Permissible Exposure Limit	OSHA 500 ppm / 1740mg/m <sup>3</sup>
Order Threshold	214 ppm

### 8. ECOLOGICAL INFORMATION


Ecotoxicity: Not available. BOD5 and COD: Not available.
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### 9. PREVENTIVE MEASURES / EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Control	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.
Personal Protective Equipment	<p><b>Eyes:</b> Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.</p> <p><b>Skin:</b> Wear appropriate protective gloves to prevent skin exposure.</p> <p><b>Clothing:</b> Wear appropriate protective clothing to prevent skin exposure.</p> <p><b>Respirators:</b> A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.</p>

### 10. HANDLING & STORAGE

Normal handling	Store in a cool, dry well ventilated area. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.	
Storage Recommendation	Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.	
<b>11. EMERGENCY / FIRST AID MEASURES</b>		
Fire	Fire Extinguishing Medium	Small Fire: Use dry chemical powder. Large Fire: Use water spray, fog or foam. Do not use water jet. Container may be explode in fire.
Exposure / First Aid Measure	Skin	Flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical aid.
	Eyes	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
	Ingestion	Do not induce vomiting. Get medical aid immediately. Never give anything by mouth to an unconscious person
	Inhalation	Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Special Procedure	Treat symptomatically and supportively.	
Antidotes	Not available	
<b>12. ACCIDENTAL RELEASE MEASURE</b>		
Spills/Leaks	Absorb spill with inert material (e.g. sand or earth), then place in suitable waste container. Do not absorb in saw dust or other combustible. Remove all sources of ignition. Dilute with plenty of water and drain into sewer.	
<b>13. DISPOSAL CONSIDERATIONS</b>		
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.		
<b>14. TRANSPORT INFORMATION</b>		

Proper shipping Name	Dichloromethane
Hazard Class	6.1 Poisonous material
UN Number	1593
Packing Group	III
Hazard Label	

#### 15. REGULATORY INFORMATION

##### European/International Regulations

European Labeling in Accordance with EC Directives

##### Risk Phrases:

R22- Harmful if swallowed.      R41- Risk of serious damage to eyes.  
R38- Irritating to skin.      R45- May cause cancer.

##### Safety Phrases:

S3- Keep in a cool place.  
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
water and seek medical advice.  
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.  
S45- In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

#### 16. MANUFACTURERS / SUPPLIERS DATA

Name of the firm		Contact Person in Emergency:
Mailing Address	Plot No. 586, Kandla Special Economic Zone, Gandhidham 320730	
Telephone Nos.	+91 9167110151	

#### DISCLAIMER

##### MSDS creation date : 19/10/2018

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