MEGHMANI FINECHEM LTD., UNIT-Dahej

MATERIAL SAFETY DATA SHEET	MSDS NO.:	REVISION DATE:	PAGE	
CHLORINE	01	01/09/2008	1 of 3	Meghmani Finechem Ltd.

Meghmani Fine Chem. Ltd. 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 :	hemical Name : Chlorine Chemical Classification : Inorganic Gas or Liqui		Inorganic Gas or Liquid
Synonyms : None		Trade Name : None	
Formula : CL2	Mol. Wt.: 71.0	CASNo.: 7782-50-5	UN No. : 1017
Regulated identifi	ication :		
Shipping Name	: Chlorine		
Codes / Label	Codes / Label : Non – flammable Gas, Poison, Class 2		
Hazardous Waste ID No : 17			
Hazchem Code : 2 X E			
Hazardous Ingredients : Chlorine CASNo : 7782-50-5			
[2] <u>PHYSICAL</u>	<u>& CHEMICAL DATA</u>		

[2] **PHYSICAL & CHEMICAL DATA**

Boiling Range / Point	: - 34°C	Physical State	: Liquid Compressed gas
Melting / Freezing Point	t: -101°C	Appearance	: Greenish Yellow
Vapour Pressure	: 4800 mm/Hg @	Odour	: Irrupting & Choking
20°C			
Vapour Density	: 2.49	Evaporation Rat	e: Not pertinent
Specific Gravity	:1.47 @ °C	pH (1% solution): Not pertinent
Solubility in water	: Insoluble		

FIRE & EXPLOSION HAZARD DATA [3]

Flammability	: No	Lower Explosive Limit	: : Not Pertinent	
TDG Flammability Clas	s : Not Pertinent	Upper Explosive Limit	: Not Pertinent	
Flash Point	: Not Pertinent	Explosion Sensitivity		
		to impact	: Not Pertinent	
Auto ignition temp.	: Not Pertinent	Explosion Sensitivity		
		to Static Electricity	: Not Pertinent	
Hazardous products of combustion: Toxic Products are generated when combustible burn in chlorine.				
Hazardous products of decomposition : Not pertinent				
Sensitivity to Mechani	cal Impact : Not p	ertinent		
Corrosive : Yes	- · · ·	Oxidizing properties	: Yes	

MEGHMANI FINECHEM LTD., UNIT-Dahej

MATERIAL SAFETY DATA SHEET	MSDS NO.:	REVISION DATE:	PAGE	
CHLORINE	01	01/09/2008	2 of 3	MEL Meghmani Fanechem Ltd.

[4] <u>REACTIVITY DATA</u>

Chemical Stability : Stable

Hazardous polymerization : Will not occur

Incompatibility : Combustible substances, finely divided metals

Reactivity :

Violent reactions with alcohol's, explosive reactions with metals, potentially dangerous reactions with sulphides, trialkyl boranes, at normal temperatures, dry chlorine does not attract steel, copper, bronze etc. Moist chlorine is corrosive.

Hazardous Reaction : Toxic products are generated when combustibles burn in chlorine.

[5] <u>HEALTH HAZARD DATA</u>

Routes of entry : Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms :

Causes eye irritation, snizzing, copious salivation, general excitement, restlessness. High concentration causes respiratory distress and violent coughing. Often with retching, death may result from suffocation

Emergency Treatment :

Inhalation : Remove victim to fresh air, support respiration, give oxygen, if necessary

Skin : Liquid contact will cause cold burn, wash immediately with water.

Eves : Flush with large amount of water, for at least 15 min., seek medical aid immediately.

Ingestion : Not pertinent

TLV (ACGIH) : 1	_ PPM (3 MG / M ³)	STEL : 3 PPM (9 MG / M ³)
LD 50 : N	Not listed	Odour threshold : 3.5 ppm (10.2 mg / m ³)
NFPA Hazard Sig	nals : Health - 3	Flammability - 0
	Reactivity - 0	Special - Not pertinent

[6] PREVENTIVE MEASURES

Personal protective	Avoid contact with liquid or vapors, provide PVC gloves & gum boot,	
Equipment	gas mask, self contained breathing apparatus.	
Handling and storage	Store in cool, dry, relatively isolated, well ventilated place. Store in	
Precautions	cylinders, pressure vessels or pipe lines.	

[7] EMERGENCY FIRST AID MEASURES

Fire	Not Combustible – does not burn	
Unusual Hazard	Poisonous gases are produced in fire.	
Special	Keep the container cool by spraying water if exposed to heat or flame. Do	

MEGHMANI FINECHEM LTD., UNIT-Dahej

MATERIAL SAFETY DATA SHEET	MSDS NO.:	REVISION DATE:	PAGE	
CHLORINE	01	01/09/2008	3 of 3	MEL Meghmani Finechem Ltd.

Procedure	not spray water on leaky container or on leak.	
Exposure	First Aid Measures: If inhaled move the victim to fresh air. If chlorine	
	comes in contact with eyes or skin, wash with plenty of water for at least	
	15 minutes, seek medical aid immediately.	
Anti-dotes	Not recommended, treat symptomatically and supportively.	
Spills	Keep up wind, use SCBA, or Acid gas cartridge respirator and full	
-	protective clothing. Shut off leaks, if without risk. Contain liquid with sand	
	or earth. Prevent the liquid from entering the sewer. Vapors create toxic	
	atmosphere, knock down vapors with water spray.	
Waste Disposal	Neutralize small liquid spillages with soda ash and drain with abundant	
Procedure	water. Cover pool with protein foam or blanket, so that release of vapor to	
	atmosphere is low and under control.	

[8] ADDITIONAL INFORMATION / REFERENCES

Additional	In case of large gas escape, the presence of cloud can be marked with
Information	ammonia with which it will turn into a mist. Run away from the gas cloud in
	the direction perpendicular to the wind direction. Avoid liquid chlorine from
	leaking and body contact. Person with pulmonary diseases should avoid the
	exposure. Concentration of 3.5 ppm produces a detectable order, 15 ppm
	causes immediate irritation of the throat. 50 ppm are dangerous for short
	exposure. 1000 ppm is fatal. Can react to cause fire / explosion on contact with
	turpention, illuminating gases, propylene, rubber, sulphamic acid,
	acetaldehyde, alcohol. Bring the leaking portion of the cylinder to upper most
	position, so that the gas escaped and not the liquid.
Reference	MSDS from ICMA, Mumbai

[9] MANUFACTURERS / SUPPLIERS DATA

Name of the firm	MEGHMANI FINE CHEM LTD.,	Contact Person in Emergency:
Mailing Address	CH1/CH2,GIDC Industrial Estate,Dahej Dist.: Bharuch, Gujarat (INDIA)	UNITE HEAD
Telephone Nos.	Fact.: 02641 - 256688	
Fax	02641 - 256666	Rev No : 01 (15/08/99)

[10] DISCLAIMER

Information contained in this MSDS is believed to be reliable but no representation, guarantee or warranties of any kind are made as its accuracy. Suitability for a particular application or result to be obtained from them. It is up to the manufacturer / seller to ensure that the information contained in the MSDS is relevant to the product manufactured / handled or sold by him as the case may be. The MFL makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.