

**MATERIAL SAFETY DATA SHEET**

(As per the Schedule-5 of TNCIMAH Rules, 1994 and Rule 62 C of Tamil Nadu Factories Rule 1950)

**1. IDENTITY OF MATERIAL**

Product Name : <b>Trichloromethane</b>		Chemical Designation : <b>Chlorinated Hydrocarbon</b>	
Trade Name : <b>Trichloromethane</b>		Synonyms : Trichloromethane	
Formula : <b>CHCl<sub>3</sub></b>	Label (Category Class) Toxic	CAS Number <b>67 – 66 – 3</b>	UN Number <b>1888</b>
Regulated Identification	Shipping Name: Trichloromethane Codes/Label : Toxic Class – 6	HAZCHEM Code : <b>2Z</b>	
	Hazardous Waste Identification Number : ID No. 6		
Hazardous Ingredients		C A S Number	
1 . Trichloromethane		67 – 66 – 3	
2 .			
3 .			
4 .			

**2. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State (Gas-, Liquid-, Solid-,) Liquid	Boiling Point In degree C : 61.2 °C	Vapour pressure at 35 deg C 197 mm Hg @ 25 °C
Appearance Colourless , watery Liquid	Melting/Freezing Point In degree C : - 63.5 °C	Evaporation rate at 30 degree C Not Listed
Odour Sweet pleasant Odur	Vapour Density (air=1) 4.12	Solubility in water At 30 degree C Not soluble
Others : Miscible with Benzene, CCl <sub>4</sub> , Alcohol		Specific Gravity : 1.49 pH : Neutral

**3. FIRE AND EXPLOSIVE HAZARDS DATA**

Explosion / Flammability : No	Flash Point (oc) Not pertinent	LEL Not pertinent	Auto ignition Temp. Not pertinent
	Flash Point (cc) Not Pertinent	UEL Not pertinent	TDG Flammability Not pertinent

**4. REACTIVE HAZARDS**

Impact	
Stability to Static Discharge	Stable
Reactivity	Reacts Violently with acetone+alkali, disilane Al, Mg Methanol + Alkali, Nitrogen tetroxide, Perchloric acid + Phosphorous pentoxide, Sodium methylate, metals.
Hazardous Polymerization / Reaction	Will not occur
Incompatibility	Strong Caustic, Chemically active metals such as Al, Mg, Mg Powder, Na, K

5. HEALTH HAZARD DATA				
Routes of Entry		: Inhalation, Ingestion, skin & eyes.		
Effects of Exposure/Symptoms		: Inhalation of large doses may cause hypo tension respiratory and myocardial depression and death. Symptoms for short term exposure include head ache, drowsiness, vomiting, dizziness, and irregular heart beat. Prolonged exposure may cause liver and kidney damage. Liquid may produce irritation.		
LD 50 (in rat) : 2.18 ml/Kg		LC 50 (in rat) (mg/1)/4 hours : Not listed		
Permissible Exposure Limit (PEL) : 10 (SHC) ppm / 50 (SHC) mg/m3		Short term Exposure Limit (STEL) : Not listed		
Threshold Limit Value (TLV) of ACGIH 10 (SHC) ppm / 50 (SHC) mg/m3		Odour Threshold Value (TLV) of ACGIH 50 ppm / 250 mg/m3		
Emergency Treatment :				
Inhalation		: Remove the victim from exposure to fresh air area. Keep patient warm and quite. If breathing stops, start artificial respiration		
Eyes & Skin		: Flush with plenty of water for 15 minutes. Remove contaminated clothes.		
Ingestion		: Do not induce vomiting give plenty of water and milk. Seek medical aid immediately.		
6. HAZARD SPECIFICATION				
NFPA Hazard Signals	Health 2	Flammability 0	Reactivity 0	Special 0
Known Hazards				
Combustible Liquid : No		Water Reactive Material : No		Irritant : No
Flammable Material : No		Oxidiser : No		Sensitizer : No
Pyrophoric Material : No		Organic Peroxide : No		Carcinogen : No
Explosive Material : No		Corrosive Material : No		Mutagen : No
Unstable Material : No		Compressed Gas : No		Other (Specify) : Nil
7. SAFE USAGE DATA				
Ventilation : General/Mechanical		Keep the containers tightly closed in cool , Well ventilated area.		
Protective Equipment Required		Eye : Chemical Splash Protective Goggle Respiratory : Breathing Apparatus Gloves : PVC or Rubber Hand gloves . Clothing : Others : --		
Precautions - Handling & Storage		Store in a dry, relatively isolated, well ventilated place.		
8. EMERGENCY RESPONSE DATA				
Fire		Fire Extinguishing Media : Carbon di oxide , Dry Chemical powder. Suitable fire Extinguishing media appropriate to local circumstances and the surrounding environment. Wear respiratory protection. Special Procedures Remove all movable containers from the fire zone immediately. Immoveable containers in the vicinity of fire may be cooled with water spray externally. Unusual Hazards :		
Exposure (Inhalation, skin and eye contact ingestion)		<b>Inhalation</b> : Remove the victim from exposure to fresh air area. Keep patient warm and quite. If breathing stops, start artificial respiration. <b>Eyes &amp; Skin</b> : Flush with plenty of water for 15 minutes. Remove contaminated clothes. <b>Ingestion</b> : Seek medical Aid immediately.		



Spills	Steps to be taken : Shut off leaks if without risk. Contain the leak. Absorb on sand. Remove all ignition source . Waste Disposal Method Seal all waste in vapour tight plastic bag for eventual disposal
<b>9. ADDITIONAL INFORMATION</b>	
A suspected human carcinogen. Maximum concentration tolerate for several hours or for prolonged exposures with slight symptoms of 2000 ppm – 2500 ppm. Due to toxic effect it has been abandoned as an anesthetic. Concentration of 68000 ppm - 82000 ppm in air kill most of the animal in few minutes. 14000 ppm may cause death after an exposure of 30- 40 minutes. <u>Explosive reaction with Sodium + methanol, Sodium menthoxide + methanol.</u>	
<b>10. SOURCES USED</b> ICMA 1996	
<b>11. MANUFACTURER/SUPPLIER DATA</b>	
Firm/s Name :	Chemplast Sanmar Limited, Plant-II,CC Division Raman Nagar Post Mettur Dam-3.
Mailing Address :	Chemplast Sanmar Limited, Plant-II,CC Division Raman Nagar Post, Mettur Dam-636 403. Salem District.
Telephone Number :	04298-230381, 230382-230385
Fax Number	04298-230 394
Contact person	S.Venkatesan Chief Executive - Operations Chemplast Sanmar Limited, Mettur Dam-636 403. Salem District
In emergency Telephone in Transit area	04298-230 381- 230 385.
<b>12. DISCLAIMER</b>	
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