Gujarat Alkalies and Chemicals Ltd.
Vadodara

SECTION 1: Product and Company Identification		
Name	**CHLOROFORM**	
Company	M/s Gujarat Alkalies and chemicals limited, P.O. Petrochemicals, Dist.: - Vadodara, Gujarat (India), Pin Code: 391346	
Synonyms	Methane trichloride; Methenyl trichloride; Formyl trichloride	
Emergency Contact Details	Phone no.	09979897101, 09879604102
	E-mail	headmarketing@gacl.co.in ccr@gacl.co.in

SECTION 2: Hazards Identification	
Emergency Overview	
	Danger: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness.
Potential Health Effects	
Inhalation	Toxic if inhaled. May cause drowsiness or dizziness.
Skin	Causes skin irritation.
Eyes	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Disposal	Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients			
Component	**CAS-No.**	**EC-No.**	**Weight %**
Chloroform	67-66-3	200-663-8	>99.5

SECTION 4: First Aid Measures	
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Skin	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Ingestion	Do not induce vomiting. Call a physician immediately.
Most important symptoms/effects	Breathing difficulties. Unconsciousness. May cause cardiac arrhythmia. May cause cardiac arrest. Symptoms of overexposure are dizziness,

	headache, tiredness, nausea, unconsciousness, cessation of breathing: Causes central nervous system depression		
Notes to Physician	Treat symptomatically. Signs of overdose include stupor and respiratory depression. Symptoms may be delayed.		
SECTION 5: Fire Fighting Measures			
Suitable Extinguishing Media	Substance is non-flammable; use agent most appropriate to extinguish surrounding fire.		
Flash Point	No data available	**Explosion Limits**	
Auto ignition Temperature	No data available	**Upper**	No data available
		Lower	No data available
Hazardous Combustion Products	Carbon monoxide (CO), Carbon dioxide (CO_2), Hydrogen chloride gas, phosgene.		
Specific Hazards Arising from the Chemical	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.		
NFPA: Health: 2 Flammability: 0 Instability: 0 Physical hazards: 0			
SECTION 6: Accidental Release Measures			
Personal Precautions	Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.		
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.		
SECTION 7: Handling and Storage			
Handling	Wear personal protective equipment. Use only under a chemical fume hood. Do not breathe vapours or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Keep away from open flames, hot surfaces and sources of ignition.		
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Store under an inert atmosphere. Protect from moisture.		
SECTION 8: Exposure Controls/Personal Protection			
Exposure Guidelines:			
Component		**OSHA PEL**	**ACGIH TWA**
Chloroform		2 ppm	10 ppm
Engineering Measures	Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.		
Personal Protective Equipment			
Eye/face Protection	Wear appropriate protective eye glasses or chemical safety goggles as described by Standard.		
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.		

SECTION 9: Physical and Chemical Properties			
Appearance	Colourless liquid	**Water solubility**	8 g/L (20°C)
Odour	aromatic sweet	**Auto-ignition temperature**	No data available
pH	No data available	**Viscosity**	0.56 mPa s at 20 °C
Melting point/freezing point	-63 °C	**Flammability (solid, gas)**	No data available
Initial boiling point and boiling range	61 °C	**Decomposition temperature**	No data available
Vapour pressure	160.0 mmHg @ 20.0 °C	**Relative density**	1.492 g/mL @ 25 °C
Vapour density	No data available	**Oxidizing properties**	No data available

SECTION 10: Stability and Reactivity	
Reactive Hazard	Sensitivity to light Moisture sensitive.
Stability	Stable under normal conditions: Unstable upon depletion of inhibitor
Conditions to Avoid	Incompatible products. Heat, flames and sparks. Excess heat. Exposure to light. Protect from moisture.
Incompatible Materials	Strong oxidizing agents. Alkali metals. Aluminium. Acetone.
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas, Phosgene.
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	No information available.

SECTION 11: Toxicological Information	
Acute toxicity	LD_{50} Oral - Rat 450 mg/kg.
Carcinogenicity	IARC: 2B - Group 2B: Possibly carcinogenic to humans.

SECTION 12: Ecological Information	
Eco toxicity	LC_{50}: = 300 mg/L, 96h static (Poecilia reticulata) LC_{50}: = 18 mg/L, 96h flow-through (Lepomis macrochirus) LC_{50}: = 18 mg/L, 96h flow-through (Oncorhynchus mykiss) LC_{50}: = 71 mg/L, 96h flow-through (Pimephales promelas)
Other	Harmful to aquatic life.

SECTION 13: Disposal Considerations	
Waste treatment methods	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Product	Offer surplus and non-recyclable solutions to a licensed disposal facility.
Contaminated packaging	Dispose in accordance with all applicable regulations.

SECTION 14: Transport Information

UN number	1888
UN proper shipping name	Chloroform
Transport hazard class	6.1
Packaging group	III
Environmental hazards	IMDG Marine pollutant: No

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation.

SECTION 16: Other Information

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.