Gujarat Alkalies and Chemicals Ltd.
Vadodara

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

SECTION 2: Hazards Identification

Emergency Overview



Danger! May be fatal if inhaled, absorbed through the skin or swallowed. Causes eye, skin, and respiratory tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause central nervous system effects. This is a CFC substance which destroys ozone in the upper atmosphere. Destruction of the ozone layer can lead to increased ultraviolet radiation which, with excess exposure to sunlight. Marine pollutant.
Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects

Inhalation	Causes respiratory tract irritation. May cause liver and kidney damage. Exposure produces central nervous system depression. May be harmful if inhaled.
Skin	Causes skin irritation. May be absorbed through the skin in harmful amounts. Contact with the skin defats the skin.
Eyes	Causes eye irritation. Vapours cause eye irritation.
Ingestion	May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Substance is a hepatotoxin and is capable of producing a toxic effect on the liver.
Disposal	Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

Component	CAS-No.	EC-No.	Weight %
Carbon tetrachloride	56-23-5	200-262-8	>99.5

SECTION 4: First Aid Measures

Inhalation	POISON material. If inhaled, get medical aid immediately. Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Skin	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
Ingestion	POISON material. If inhaled, get medical aid immediately. Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Most important symptoms/effects	The most important known symptoms and effects are described in the labelling.

Notes to Physician	Treat symptomatically and supportively.		
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	> 982 ^{0}C	**Upper**	No data available
		Lower	No data available
Hazardous Combustion Products	Carbon monoxide (CO), Carbon dioxide (CO2), 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: 3 Flammability: 0 Instability: 0 Physical hazards: NA			
SECTION 6: Accidental Release Measures			
Personal Precautions	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.		
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	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not breathe vapour. Use only with adequate ventilation.		
Storage	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.		
SECTION 8: Exposure Controls/Personal Protection			
Exposure Guidelines:			
Component		**OSHA PEL**	**ACGIH TWA**
Carbon tetrachloride		10 ppm TWA	5 ppm TWA
Engineering Measures	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use only under a chemical fume hood.		
Personal Protective Equipment			
Eye/face Protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards.		
Skin and body protection	Wear appropriate protective gloves to prevent skin exposure.		

SECTION 9: Physical and Chemical Properties			
Appearance	clear, colourless liquid	**Water solubility**	Insoluble
Odour	chloroform like	**Auto-ignition temperature**	> 982 ^{0}C
pH	No data available	**Viscosity**	0.97 mPa.s at 20 °C
Melting point/freezing point	-23 ^{0}C	**Flammability (solid, gas)**	No data available
Initial boiling point and boiling range	76 ^{0}C @ 760 mm Hg	**Decomposition temperature**	> 100°C
Vapour pressure	160.0 mmHg @ 20.0 °C	**Relative density**	1.594 g/cm^3 @ 25 °C
Vapour density	5.31 (air=1)	**Oxidizing properties**	No data available

SECTION 10: Stability and Reactivity	
Reactive Hazard	No data available
Stability	Stable under normal temperatures and pressures.
Conditions to Avoid	Light, excess heat.
Incompatible Materials	Alkali metals, powdered aluminum, powdered magnesium, zinc powder, ethylene, allyl alcohol, barium, fluorine, dimethylformamide, powered beryllium, decaborane, potassium tertbutoxide.
Hazardous Decomposition Products	Hydrogen chloride, chlorine, phosgene, carbon monoxide, carbon dioxide, chlorine dioxide, which may be spontaneously explosive.
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	No information available.

SECTION 11: Toxicological Information	
Acute toxicity	Oral, rat: LD_{50} = 2350 mg/kg;
Carcinogenicity	Carcinogenicity (Category 2), H351

SECTION 12: Ecological Information	
Eco toxicity	mortality LC_{50} - Danio rerio (zebra fish) - 24.3 mg/l - 96 h Immobilization EC50 - Daphnia magna (Water flea) - 35 mg/l – 48 h
Other	Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal Considerations	
Waste treatment methods Waste is classified as hazardous. Dispose of in accordance with the 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	1846
UN proper shipping name	CARBON TETRACHLORIDE
Transport hazard class	6.1
Packaging group	II
Environmental hazards	IMDG Marine pollutant: Yes

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.