

1,2,3-TRICHLOROPROPANE

TCN

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION
Common Synonyms Allyl trichloride Glycerol trichlorhydrin Propane, 1,2,3-trichloro Trichlorhydrin	Liquid	Colorless	Strong acid odor	4.1 Flash Point: 174°F O.C. 164°F C.C. 4.2 Flammable Limits in Air: 3.2% - 12.6% 4.3 Fire Extinguishing Agents: Water; foam; carbon dioxide; dry chemical 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent. 4.5 Special Hazards of Combustion Products: Highly toxic chloride fumes including hydrochloric acid. 4.6 Behavior in Fire: It burns and produces highly toxic chloride fumes. 4.7 Auto Ignition Temperature: 579°F 4.8 Electrical Hazards: Currently not available 4.9 Burning Rate: Currently not available 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichiometric Air to Fuel Ratio: 16.7 (calc.) 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): 7.0 (calc.) 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	7.1 Grades of Purity: 90% min. to 99+%\n7.2 Storage Temperature: Store out of direct sunlight. 7.3 Inert Atmosphere: Currently not available 7.4 Venting: Currently not available 7.5 IMO Pollution Category: C 7.6 Ship Type: 2 7.7 Barge Hull Type: 2
Keep people away. Avoid contact with liquid and vapor. Wear goggles, self-contained breathing apparatus, rubber gloves, and overclothing made of rubber, polyethylene or polyvinyl chloride. Shut off ignition sources. Call fire department. Notify local health and pollution control agencies. Protect water intakes.				8. HAZARD CLASSIFICATIONS	
Fire	Combustible. Highly toxic and irritating fumes are generated when ignited. Wear goggles, self-contained breathing apparatus, rubber gloves, and overclothing made of rubber, polyethylene or polyvinyl chloride. Extinguish fire with water, foam, carbon dioxide or dry chemical.				8.1 49 CFR Category: Not listed 8.2 49 CFR Class: Not pertinent 8.3 49 CFR Package Group: Not listed. 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)..... 3 Flammability (Red)..... 2 Instability (Yellow)..... 0
Exposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose, throat, and skin. If inhaled, will cause anesthesia, dizziness, and nausea. Move to fresh air. IF BREATHING has stopped, give artificial respiration. IF BREATHING is difficult, give oxygen. LIQUID Harmful if swallowed. Irritating to skin and eyes. Flush affected areas with plenty of water. Remove from skin with soap and water. Remove contaminated clothing. IF IN EYES, hold eyelids open and flush with water for 15 minutes. If swallowed and victim is CONSCIOUS, give two glasses of water and have victim induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.				8.6 EPA Reportable Quantity: Not listed. 8.7 EPA Pollution Category: Not listed. 8.8 RCRA Waste Number: Not listed 8.9 EPA FWPCA List: Not listed
Water Pollution	Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.				9. PHYSICAL & CHEMICAL PROPERTIES
1. CORRECTIVE RESPONSE ACTIONS Stop discharge Contain Collection Systems: Pump; Dredge Do not burn		2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: 36; Halogenated hydrocarbon 2.2 Formula: <chem>CH2ClCHClCH2Cl</chem> 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed 2.5 CAS Registry No.: Currently not available 2.6 NERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51134			
3. HEALTH HAZARDS					
3.1 Personal Protective Equipment: Rubber gloves, safety goggles, impermeable clothing, and other equipment to prevent contact with the body. Organic canister or air pack as required. 3.2 Symptoms Following Exposure: Inhalation of vapor causes anesthesia, dizziness, and nausea. Vapor is highly irritating by inhalation routes and moderately irritating by dermal routes. Exposure of eyes to vapor may result in slight, transient injury to the cornea. 3.3 Treatment of Exposure: Get medical assistance. INHALATION: Remove victim to fresh air. If breathing has stopped give artificial respiration. INGESTION: If conscious, give two glasses of water and induce vomiting. No specific antidote. EYES: Hold eyelids open, flush with water for 15 minutes. SKIN: Flush immediately with water. Remove liquid from skin with soap and water. Remove contaminated clothing. 3.4 TLV-TWA: 10 ppm 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD ₅₀ = 320-505 mg/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Toxicity is cumulative. Causes damage to heart, liver, and kidneys in humans. May cause death or permanent injury after very short exposure to small quantities. 3.10 Vapor (Gas) Irritant Characteristics: Severe irritant to eyes and skin. High irritant via oral and inhalation routes. 3.11 Liquid or Solid Characteristics: Rated 4 on scale of 1-10 when tested externally on eyes of rabbits. Dermal LD ₅₀ (rabbit) = 1.77 g/kg. 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: 100 ppm. 3.14 OSHA PEL-TWA: 50 ppm. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA A EGL: Not listed					
4. FIRE HAZARDS					
5. CHEMICAL REACTIVITY					
6. WATER POLLUTION					
7. SHIPPING INFORMATION					
8. HAZARD CLASSIFICATIONS					
9. PHYSICAL & CHEMICAL PROPERTIES					
10. NOTES					

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
C U R R E N T L Y N O T A V A I L A B L E			C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
S L I G H T L Y S O L U B L E			C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E