

Safety Data Sheet

Part Number 327057

Section 1. Substance Identity and Company Contact Information

Product Name	Trichloroethylene in Air	Product Part Number(s)	01-TRICLORKIT and 01-TRICLORGAS
Trade Name	Trichloroethylene in Air	Unit Size	103 liters - 3.6 Cu. Ft. - 1,000 psig
Company	OI Analytical, P.O. Box 9010, College Station, TX 77842-9010, Phone: (979) 690-1711, Fax: (979) 690-0440		
Emergency No. 1-800-424-9300 (Chemtrec). Use only in the event of chemical emergencies involving spills, leaks, fire, exposure, or accidents involving chemicals.			

Section 2. Hazards Identification

Pictogram(s)



Signal Word

Warning

GHS Classification

Physical, Gases under Pressure, Compressed Gas

Hazard Statement(s)

Harmful if swallowed or inhaled. Affects heart, central nervous system, liver, and kidneys. Causes severe skin irritation. Causes irritation to eyes and respiratory tract. Suspect cancer hazard. May cause cancer. Risk of cancer depends on level and duration of exposure.

Precautionary Statement(s)

Store in a well ventilated place. Protect from sunlight. Do not expose to temperature exceeding 50 °C / 122 °F.

Target Organ(s)

Chronic exposure may cause liver, kidney, central nervous system, and peripheral nervous system, and peripheral nervous system effects. Workers chronically exposed may exhibit central nervous system depression, intolerance to alcohol, and increased cardiac output. This material is linked to mutagenic effects in humans. This material is also a suspect carcinogen.

Potential Health Effects	Eye:	Vapors may cause severe irritation with redness and pain. Splashed may cause eye damage.
	Skin:	Cause irritation, redness and pain. Can cause blistering. Continued skin contact has a defatting action and can produce rough, dry, red skin resulting in secondary infection.
	Ingestion:	Causes irritation to gastrointestinal tract. May also cause effects similar to inhalation. May cause coughing, abdominal pain, diarrhea, dizziness, pulmonary edema, and unconsciousness. Kidney failure can result in severe cases. Estimated fatal dose is 3-5 mL/kg.
	Inhalation:	Vapors can irritate the respiratory tract. Causes depression of the central nervous system with symptoms of visual disturbances and mental confusion, incoordination, headache, nausea, euphoria, and dizziness. Inhalation of high concentrations could cause unconsciousness, heart effects, liver effects, kidney effects, and death.
Chronic Effects/ Carcinogenicity	IARC:	Yes (2A)
	NTP:	No data available
	OSHA:	No
Teratology (Birth Defects) Information	No data available	
Reproductive Information	This material has been linked to mutagenic effects in humans.	
NFPA Ratings	Health:	2
	Flammability:	1
	Reactivity:	0
HMIS Rating	Health:	2
	Flammability:	1
	Reactivity:	0
	Protective Equipment:	4 (Gloves, lab coat, vapor respirator. Be sure to use an approved certified respirator or equivalent. Wear appropriate respirator when ventilation is adequate. Splash goggles.)

Section 3. Chemical Composition and Data on Components

Ingredient	CAS No.	Percent	Hazard Data	
			ACGIH TLV	OSHA PEL
Trichloroethylene	79-01-6	≤ 1 mole%	50 ppm	100 ppm
Air	No data available	99.9	No data available	No data available

Section 4. First Aid Measures

General Advice	No data available
If Inhaled	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
In Case of Skin Contact	Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In Case of Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
If Swallowed	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.
Indication of Any Immediate Medical Attention and Special Treatment Needed	Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning.

Section 5. Fire-fighting Measures

General Information	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Combustion by-products include phosgene and hydrogen chloride gases. Structural firefighters' clothing provides only limited protection to the combustion products of this material.
Suitable Extinguishing Media	Use water spray to keep fire exposed containers cool. If substance does ignite, use CO ₂ , dry chemical or foam.
Special Hazards Arising from the Substance or mixture	No data available
Advice for Firefighters	No data available
Flash Point	None
Autoignition Temperature	420 °C (788 °F)
Further Information	No data available

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures	Evacuate all personnel from affected area. Vapors are heavier than air and will accumulate in low lying areas.
Environmental Precautions	No data available
Methods and Materials for Containment and Cleaning	Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use nonsparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, and earth), and place in chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! U.S. Regulations (CERCLA) require reporting spills and releases to soil, water, and air in excess of reportable quantities
Reference to Other Sections	For disposal, see Section 13.

Section 7. Handling and Storage

Precautions for Safe Handling	Protect against physical damage. Isolate from any source of heat or ignition. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids); observe all warnings and precautions listed for the product below.
Conditions for Safe Storage, Including any Incompatibilities	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Ground all equipment containing material carcinogenic, teretogenic, or mutagenic materials should be stored in a separate lock safety storage cabinet room.
Specific End Use(s)	Apart from the uses mentioned in Section 1, no other specific uses are stipulated.

Section 8. Exposure Controls and Personal Protection

Components with Workplace Control Parameters	Contains no substances with occupational exposure limit values.
Appropriate Engineering Controls	Local exhaust ventilation as necessary to limit exposure below the acceptable exposure limits.
Eye/Face Protection	Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.
Skin Protection	Wear neoprene gloves.
Body Protection	Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene is a recommended material for personal protective equipment.
Respiratory Protection	If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. breathing air quality must meet the requirements of the OSHA respiratory protection standard (29 CFR 1910.13). This substance has poor warning properties. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29 CFR 1910.134 for details.
Control of Environmental Exposure	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminated at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Section 9. Physical and Chemical Properties

Appearance	Form: Gas; Color: Colorless
Odor	Chloroform
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	-73 °C (-99 °F)
Initial Boiling Point and Boiling Range	87 °C (189 °C)
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	57.8 @ 20 °C (68 °F)
Vapor Density	4.5
Relative Density	No data available
Water Solubility	Practically insoluble in water. Readily miscible in organic solvents.

Partition Coefficient : n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Other Safety Information	No data available

Section 10. Stability and Reactivity

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage. Will slowly decompose to hydrochloric acid when exposed to light and moisture.
Possibility of Hazardous Reactions	May produce carbon monoxide, carbon dioxide, hydrogen chloride and phosgene when heated to decomposition.
Conditions to Avoid	Heat, flu, ignitions sources, light moisture, and incompatibilities
Incompatible Materials	Strong caustics and alkalis, strong oxidizers, chemically active metals, such as barium, lithium, sodium, magnesium, titanium and beryllium, and liquid oxygen.

Section 11. Toxicological Information

Routes of Exposure	<i>On the skin:</i>	Yes
	<i>On the eye:</i>	Yes
	<i>Inhalation:</i>	Yes
	<i>Ingestion:</i>	Yes
Respiratory or Skin Sensitization	No data available	
Signs and Symptoms of Overexposure	No data available	
Toxicity Data	<i>Oral rat LD50</i>	LD ₅₀ :5,650 mg/kg; investigated as tumorigen, mutagen, reproductive effector.

Section 12. Ecological Information

General Notes	When released into the soil, this material may leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released to water, this material is expected to quickly evaporate. This material has not experimentally-determined bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days.
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Section 13. Disposal Considerations

Product	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA-approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.
Contaminated Packaging	Dispose of container and unused contents in accordance with federal, state, and local requirements.

Section 14. Transport Information

DOT Shipping Name	Trichloroethylene
UN Proper Shipping Name	No data available
DOT Hazard Class	6.1
Packing Group	No data available
UN Number	UN1710
Hazardous Ingredients	No data available
DOT Label	Keep away from food.
DOT Placard	No data available

IMDG Shipping Name	No data available
UN Number	UN1710
Class	No data available
Packing Group	No data available

IATA Shipping Name	No data available
Technical Shipping Name	No data available
IATA Hazard Class	No data available
UN Number	UN1710
Hazardous Ingredients	No data available
IATA Label	No data available
IATA Placard	No data available

Section 15. Regulatory Information

OSHA Status	Hazardous by definition of Hazardous Communication Standard (29 CFR 1910.1200)	
TSCA Status	Yes	
CERCLA Reportable Quantity	100	
SARA Title III	No data available	
RCRA Status	U228	
California Proposition 65	This product contain the following ingredients for which the State of California has found to cause cancer, birth defects, or other productive harm which would require a warning under the statute: Trichlorethylene	
Chemical Weapons Convention	No	
TSCA 12 (b)	No	
SARA 311/312	Acute:	Yes
	Chronic:	Yes
	Fire:	No
	Pressure:	No
	Reactivity:	No
Australian Hazchem Code	None allocated	
Poison Schedule	S6	
WHMIS	This SDS has been prepared according to the hazard criteria of the Controlled products Regulations (CPR) and the SDS contains all of the information required by the CPR.	

Section 16. Other Information

Date Prepared: August 5, 2003

Revised: May 27, 2015

For R&D use only. Not for drug, household, or other uses.

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