

6. Accidental Release Measures

Personal Protection	Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with detergent and copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with detergent and copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sunlight. Protect against moisture to prevent decomposition and corrosion.

8.1 Workplace Exposure Limits

Workplace Exposure Limits	Long Term (8hr TWA):	50.00 ppm	345.0 mg m-3
	Short Term (15min Period):	100.0 ppm	689.0 mg m-3

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hands	Use solvent resistant gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & Chemical Properties

Appearance	Clear colourless liquid.
Odour	Ethereal.
pH	Not available
Boiling point	122.2 °C
Melting point	23.3- °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	10mmHg @ 20,C
Relative Density	1.5960 °C
Water Solubility	0.01%

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces and naked flames.
Materials to Avoid	Reacts with potassium, sodium, lithium and their alloys producing explosive atmospheres of chloroacetylene and dichloroacetylene which will ignite in air. Reacts with potassium hydroxide, bromoform and nitrogen tetroxide to form explosive compounds.

10. Stability & Reactivity (continued)

Hazardous Will evolve very toxic fumes of cyanide if involved in a fire or heated to decomposition.
Decomposition Products

11. Toxicological Information

Eyes Both the vapour and liquid are, irritating to the eyes but unlikely to cause serious injury.

Skin It is an irritant to the skin producing dermatitis. Skin absorption may be an important exposure route producing toxic effects similar to inhalation.

LD50 Skin Not available

Ingest Ingestion will produce gastric disturbances, vomiting, narcosis, paralysis and

LD50 Ingest Oral Rat 2629 mg/kg

Inhalation Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour will result in headaches, dizziness, exhaustion mental instability, drowsiness and paralysis. Fatal cases of inhalation exposure have occurred.

Carcinogenicity Carcinogen - category 3. There is limited evidence to suggest that tetrachloroethylene is carcinogenic in animals.

Mutagenicity A mutagen.

Reproductive Effects It is considerably embryotoxic, but only weakly teratogenic with a low incidence of malformations.

12. Ecological

Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

Disposal Methods Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems.

Contaminated Packaging Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name Tetrachloroethylene
UN Number 1897
UN Classification 6.1 Toxic
Subsidiary Risk None
Flash Point Not available
Packing Group III
Transport Category 2
Marine pollutant Yes
ADR Hazard ID 60

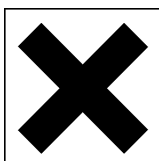


15. Regulatory Information

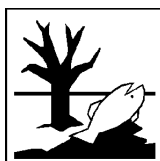
Labelling Harmful, Dangerous for the Environment.
Classification

Label Symbols

Xn



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15. Regulatory Information (continued)

Risk & safety Phrases	Limited evidence of carcinogenic effect. Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Keep out of reach of children. Do not breath vapour. Wear suitable protective clothing and gloves. Avoid release to the environment, refer to special instructions/safety data sheet. Carcinogen category: 3
EEC Number	204-825-9

16. Other Information

Document Information	<p>This document has been prepared in accordance with directive 88/379/EEC.</p> <p>The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.</p> <p>Revision Date: 26/11/08. Data reviewed and PDF file generated: 17/03/10. Copyright 2010 Camlab Limited.</p>
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