



Comet Chemical Company Ltd.  
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# Material Safety Data Sheet

## TRICHLOROETHYLENE

Revision Date: 2008/07/31

### Section 1 : PRODUCT AND COMPANY IDENTIFICATION

**Chemical family:** Not available.

**Product uses:** Cleaning solvent.

**Product name:** Trichloroethylene

**Supplier:** Comet Chemical Ltd.  
3463 Thomas Street  
Innisfil, On.  
L9S 3W4.

**Supplier 24 hour phone number:** (705)436-5580 – weekdays from 8:00-5:00.  
(800)567-7455 all other times (Newalta Services).

### Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
79-01-6	100	TRICHLOROETHYLENE	50 PPM	4920 MG/KG RAT ORAL  2400 MG/KG MOUSE ORAL  > 20000 MG/KG RABBIT DERMAL	8450 PPM/4H MOUSE INHALATION 220,000 MG/M3/20M MOUSE INHALATION 140700 MG/M3/1H RAT INHALATION

### Section 3 : HAZARD IDENTIFICATION

**Route of entry:** Eye contact, skin contact, skin absorption, inhalation and ingestion.

#### Effects of acute exposure

**Eye contact:** Irritant.

**Skin contact:** May cause irritation.  
Drying and defatting of skin.

**Skin absorption:** May be absorbed in toxic amounts.

**Inhalation:** Irritant.  
May cause loss of consciousness.  
May cause drowsiness.  
May cause headache, dizziness and nausea.  
May cause excitement.  
May cause irregular pulse, ventricular fibrillation.

**Ingestion:** See inhalation effects.

**Effects of chronic exposure:** Prolonged or repeated overexposure may cause drying and cracking of the skin (dermatitis).  
May result in weight loss.  
Visual impairment.  
Painful joints.  
May cause wheezing.  
May cause fatigue.

**Sensitization to product:** No

**Carcinogenic effects:** Trichloroethylene group 2A as per IARC.

**Reproductive effects:** Effects have been reported in animals.

**Teratogenicity:** Not available.

**Mutagenicity:** Not available.

**Synergistic materials:** None known.

#### Section 4 : FIRST AID MEASURES

**Skin contact:** Remove contaminated clothing.  
Wash thoroughly with soap and water.  
Seek medical attention if irritation persists.

**Eye contact:** Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.

**Inhalation:** Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.

**Ingestion:** Do not induce vomiting. Keep person warm, quiet and get medical attention.  
Guard against aspiration of liquids into lungs.  
If vomiting occurs, keep head below hips.  
Never give anything by mouth to an unconscious person.  
Immediately drink plenty of water.

**Note to physician:** Do not give adrenaline or similar drugs.

#### Section 5 : FIRE FIGHTING MEASURES

**Flammability:** Not flammable.

**Conditions of flammability:** Surrounding fire.

**Extinguishing media:** Suitable for surrounding fire.

**Special procedures:** Firefighters should wear adequate protective gear.  
Self-contained breathing apparatus required.

**Auto-ignition temperature (°C):** 420

**Flash point (°C), method:** Vapor may be ignited by an open flame at > 100°C.

**Lower flammability  
limit (% vol):** 8

**Upper flammability  
limit (% vol):** 52

### Explosion Data

- Sensitivity to static discharge:** Not sensitive.
- Sensitivity to mechanical impact:** Not sensitive.
- Hazardous combustion products:** Carbon monoxide (CO).  
Phosgene.  
Hydrogen chloride (HCl).
- Rate of burning:** Not available.
- Explosive power:** Not available.

## Section 6 : ACCIDENTAL RELEASE MEASURES

- Leak/Spill:** Dike area to prevent spreading.  
Prevent entry into drains, sewers, and other waterways.  
Ventilate area.  
Wear appropriate protective equipment.  
Pump to containers or soak up on inert absorbent.  
Place in a closed container for disposal.  
Remove contaminated soil and treat to protect groundwater.

## Section 7 : HANDLING AND STORAGE

- Handling procedures and equipment:** Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wash thoroughly after using, particularly before eating or smoking.  
Wear personal protective equipment appropriate to task.  
Avoid smoking in area of use.  
Avoid contact with skin, eyes and clothing.  
Launder contaminated clothing prior to reuse.
- Storage requirements:** Store in a cool and well ventilated area.  
Store away from incompatible materials.  
Store in closed containers.  
Avoid basement storage which may lead to trapping of heavy vapor.

## Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

### Precautionary Measures

**Gloves/Type:**



Polyvinyl alcohol gloves.  
Viton gloves.  
Barricade gloves.  
Trellchem gloves.


**Respiratory/Type:** None required under normal use.  
If ventilation is not adequate.  
NIOSH approved chemical cartridge respirator.

**Eye/Type:** 

Safety glasses with side-shields.



Or goggles.

**Footwear/Type:** 

Impervious boots.  
When splashing is possible.

**Clothing/Type:** Long sleeve shirt, long trousers.



Impervious apron.  
When splashing is possible.

**Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

**Ventilation requirements:** Ventilate adequately.  
As needed to stay below TLV.

**Exposure limit of material:** See hazardous ingredients section.

## Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Appearance & odor:** Colourless.  
Clear  
Chloroform-like odor.

**Odor threshold (ppm):** ~80

**Vapour pressure (mmHg):** 60 mmHg/8kPa @ 20°C.

**Vapour density (air=1):** 4.5

### Volatiles (%)

**By volume:** Not available.

**Evaporation rate  
(butyl acetate = 1):** Not available.

**Boiling point (°C):** 87

**Freezing point (°C):** -73°C

**pH:** None  
(does not yield hydrogen ions in watery solution).

**Specific gravity @ 20 °C:** 1.46

**Solubility in water (%):** (soluble in most organic solvents).  
0.11/100g.

**Coefficient of water\oil dist.:** Not available.

**VOC:** Not available.

### Section 10 : STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Conditions of instability:** Avoid high temperatures.

**Hazardous polymerization:** Will not occur.

**Incompatible substances:** Strong alkalis.  
Metals.  
Carbon monoxide.  
Strong oxidizing agents.  
Ozone  
Phosgene.  
Liquid oxygen.

**Hazardous decomposition products:** See hazardous combustion products.

### Section 11 : TOXICOLOGICAL INFORMATION

**LD50 of product, species & route:** 20,000 mg/kg rabbit dermal.  
(estimated).  
2400 mg/kg mouse oral.  
5650 mg/kg rat oral.  
7380 mg/kg rabbit oral.

**LC50 of product, species & route:** Estimated.  
8450 ppm/4h mouse inhalation.

### Section 12 : ECOLOGICAL INFORMATION

**Environmental toxicity:** No data at this time.

**Environmental fate:** No data at this time.

### Section 13 : DISPOSAL CONSIDERATIONS

**Waste disposal:** In accordance with municipal, provincial and federal regulations.  
May be incinerated.

### Section 14 : TRANSPORT INFORMATION

**TDG classification:** TRICHLOROETHYLENE  
UN1710  
Class 6.1  
PG III.



**Special shipping information:** See transportation information.

**Section 15 : REGULATORY INFORMATION**

**WHMIS classification:**

D1B, D2A, D2B.



**DSL status:** Appears on DSL.

**Section 16 : OTHER INFORMATION**

**Supplier MSDS date:** 2009/07/31

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