

**Distributed By:**  
**SAL Chemical**  
**3036 Birch Drive**  
**Weirton, WV 26062**  
**304-748-8200**



## Safety Data Sheet

**Section 1: Identification**

<b>Product Name:</b>	Trichloroethylene		
<b>Synonyms:</b>	1,1,2-Trichloroethene	1-Chloro-2,2-Dichloroethylene	Ethylene trichloride
	TCE	Trichlorethylene	
<b>CAS No.:</b>	79-01-6		
<b>Chemical Formula:</b>	C <sub>2</sub> HCl <sub>3</sub>		
<b>Company:</b>	AllChem Industries ICG, Inc. 6010 NW First Place Gainesville, FL 32607 Tel: (352) 378-9696	<b>Emergency Number:</b> CHEMTREC: 800-424-9300	
<b>Recommended Use:</b>	Manufacture / Distribution of substance	Use as a functional fluid	
	Formulation & (re)packing of substances and mixtures	Use as a process solvent	
	Use in cleaning agents	Sealants and adhesives	

**Section 2: Hazard(s) Identification**

**Emergency Overview:** Aspiration hazard.  
 Carcinogen, Irritant, Mutagen.  
 May cause respiratory and digestive tract irritation.  
 May cause cancer based on animal studies.  
**Target Organs:** Central nervous system, liver, heart, lungs.

<b>GHS Classification:</b>	<b>Category</b>
Skin irritation	2
Eye irritation	2A
Skin Sens.	1
Germ cell mutagenicity	2
Carcinogenicity	1B
STOT - single exposure	2
Chronic aquatic toxicity	3

**GHS Label elements:****Pictograms:****Signal Word:****Danger**

**Hazard Statements:**

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary Statements:**

Code	Description
P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection
P302, P352	IF ON SKIN: Wash with plenty of soap and water.
P202	Do not handle until all safety precautions have been read and understood
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305, P351, P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Other classifications:****NFPA Rating:**

Health:	2
Fire:	1
Reactivity:	0

**HMIS:**

Health:	2
Flammability:	0
Physical:	0

### Section 3: Composition, Information on Ingredients

Component	CAS No	Index No	Concentration	EC-No
Trichloroethylene	79-01-6	602-027-00-9	-	201-167-4

### Section 4: First-aid measures

<b>Inhalation:</b>	<p>Move the exposed person to fresh air at once.</p> <p>Perform artificial respiration if breathing has stopped.</p> <p>If breathing is difficult, properly trained personnel may assist affected person by administering oxygen.</p> <p>Get medical attention if any discomfort continues.</p>
<b>Ingestion:</b>	<p><b>DO NOT INDUCE VOMITING!</b></p> <p>Drink plenty of water.</p> <p>Do not give victim anything to drink if he is unconscious.</p> <p>Get medical attention immediately!</p>



**Skin Contact:** Remove contaminated clothes and rinse skin thoroughly with water.  
Get medical attention if any discomfort continues.

**Eye Contact:** Promptly wash eyes with plenty of water while lifting the eye lids.  
Make sure to remove any contact lenses from the eyes before rinsing.  
Continue to rinse for at least 15 min.  
Get medical attention if any discomfort continues.

**NOTE TO PHYSICIAN:** Treat symptomatically and supportively.

### Section 5: Fire-fighting measures

**Conditions of flammability:** Not flammable or combustible.

**Extinguishing Media:** Extinguish with foam, carbon dioxide, dry powder or water fog.  
Do not use water jet as an extinguisher, as this will spread the fire.

**Special protective equip.:** Wear a self-contained breathing apparatus MSHA/NIOSH (approved or equivalent), and full protective gear.

**Hazardous combustion products:** Hydrogen chloride, Chlorine, Phosgene, Carbon monoxide, Carbon Dioxide.

**Special Information:** Vapors can travel to a source of ignition and back.  
Containers may explode in the heat of a fire.

### Section 6: Accidental release measures

**Personal precautions:** Wear personal protection equipment.  
Evacuate surrounding areas.

**Emergency procedures:** Remove all sources of ignition.  
Provide ventilation.

**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 of containment/cleanup:** Absorb spill with inert material, (e.g., vermiculite, dry sand or earth), then place into a chemical waste container.

### Section 7: Handling and storage

**Handling:** Do not use in confined spaces without adequate ventilation and/or respirator.  
Do not eat, drink or smoke when using product. Do not ingest.  
Eliminate all sources of ignition.  
Handle product only in closed system or provide adequate exhaust ventilation at machinery  
Avoid inhalation of vapors/spray and contact with skin and eyes.  
Container must be kept tightly closed.  
Provide good ventilation.

**Storage:** Keep away from heat, sparks, open flame, direct sunlight.  
Store in tightly closed original container in a dry, cool and well-ventilated place.  
Do NOT use storage tank made of: Aluminum, aluminum alloy, or zinc  
May attack some plastics, rubber and coatings.



## Section 8: Exposure controls/ personal protection

<b>Exposure Limits:</b>	<b>Regulator:</b>	<b>Test:</b>	<b>Allowance:</b>
	Workplace Exposure Limit (WEL)	STEL	150 ppm      820 mg/m <sup>3</sup>
	Workplace Exposure Limit (WEL)	TWA	100 ppm      550 mg/m <sup>3</sup>
<b>Engineering Controls:</b>	Use adequate ventilation to keep airborne concentrations low. An emergency eye wash/shower must be readily accessible to the work area.		
<b>Personal Protective Equipment:</b>			
<b>Personal Respirators:</b>	Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.		
<b>Skin Protection:</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.		
<b>Eye Protection:</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.		

## Section 9: Physical and chemical properties

### Appearance

Physical State:	Liquid
Color:	Clear, colorless
<b>Odor:</b>	Chlorinated hydrocarbons
Odor Perception Threshold:	No data available
pH:	No data available

### Specific Temperatures:

Freezing/Melting Point:	-84.8°C      -121°F
Boiling Point:	87.760 mmHg
Decomposition temperature:	No data available.

### Flammability Characteristics:

Flash Point:	Does Not Flash
Auto-ignition Temperature:	410°C      770°F

### Explosivity Characteristics:

Lower (LEL):	8% (V)
Upper (UEL):	44.8% (V)
Vapor Pressure:	9.9 kPa @ 25°C

### Density:

Vapor Density (air=1):	4.53
Relative Density (water=1):	1.47

### Solubility:

In Water:	Insoluble in water.
Octanol/water Partition Coefficient:	log P <sub>ow</sub> : 2.53

### Complementary Data:

Molecular Weight:	No data available
Evaporation Rate:	No data available

**Optional Data:**

Viscosity: 0.58 mPas @ 20 °C

### Section 10: Stability and reactivity

<b>Stability:</b>	Stable at room temperature and under normal conditions.
<b>Hazardous Reactions:</b>	Will not polymerize.
<b>Conditions to Avoid:</b>	Incompatible materials, ignition sources, and high temperatures/ direct sunlight.
<b>Incompatibilities:</b>	Strong alkalis. Reaction with strong alkali metal hydroxides will form dichloroacetylene which can spontaneously ignite in air Strong oxidizing substances, amines. Avoid contact with metals such as: zinc powders, aluminum powders, magnesium powders, potassium, sodium. Avoid prolonged contact or storage with aluminum or its alloys
<b>Hazardous Decomposition Products:</b>	Toxic gases of hydrogen chloride, chlorine, phosgene, carbon monoxide, carbon dioxide.

### Section 11: Toxicological information

**Potential health effects:**

Inhalation:	Vapors may cause drowsiness and dizziness. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Skin Contact:	Skin irritation. May cause an allergic skin reaction Prolonged contact may cause redness, irritation and dry skin.
Eye Contact:	May cause temporary eye irritation.
Ingestion:	No specific symptoms noted.

**Numerical measures of Toxicity -**

<b>Acute Toxicity:</b>	<u>Test</u>	<u>Subject</u>	<u>Value</u>
Inhalation	LC 50	Rat	12,500 ppm (4 hours)
Oral	LD 50	Rat	5,400 mg/kg
Dermal	LD 50	Rabbit	>2,000 mg/kg
<b>Additional Information:</b>	<b>RTECS:</b>	KX4550000	

### Section 12: Ecological information

<b>Eco toxicity:</b>	<u>Test</u>	<u>Subject</u>	<u>Value</u>
Fish:	LC 50	Limanda	16 mg/L (96 hours)
Aquatic invertebrates:	EC 50	Daphnia magna	20.8 mg/l (48 hours)
Aquatic plants:	EC 50	Chlamydomonas reinhardtii	36.5 mg/l (72 hours)
Microorganisms:	EC 50	Activated sludge	260 mg/l (3 hours)
<b>Persistence and degradability:</b>	The product is not readily biodegradable.		2.4 Degradation (%): 14 days
<b>Bio accumulative potential:</b>	Bioconcentration potential is low.		BCF < 100
<b>Mobility in soil:</b>	Potential for mobility in soil is very high		Soil Koc > 41



### Section 13: Disposal considerations

**Product:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

**Disposal:** Dispose of according to Federal, State, and Local Regulations

### Section 14: Transport information

*The information in this section is for reference only and should not take the place of a bill of lading specific to an order.*

<b>UN number:</b>	UN 1710
<b>UN proper shipping name:</b>	Trichloroethylene
<b>Transport hazard class:</b>	6.1
<b>Packing group number:</b>	III
<b>Marine Pollutant:</b>	No
<b>Labels &amp; Placards:</b>	TOXIC
<b>EMS-No</b>	F-A, S-A
<b>RQ:</b>	100 lbs.

### Section 15: Regulatory information

#### US FEDERAL

**TSCA:** CAS# 79-01-6 is listed on the TSCA inventory.

### Section 16 - Other Information

**SDS Creation Date:** 3/11/2013

**Revision date:** 3/10/2015

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