



VAN CAO CHEMICAL

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** PCE

**Other means of identification**

**Recommended use** Industrial Leak Sealant.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** VANCAO CHEM

**Address** 200 Hermann Drive, Alvin, Texas 77511

**Telephone** +84 0903.735.753.

**E-mail** vancaochem79@gmail.com.

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 2

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2

Hazardous to the aquatic environment, long-term hazard Category 2

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Warning

**Hazard statement** Suspected of causing cancer. Toxic to aquatic life with long lasting effects.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

**Response** If exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Tetrachloroethylene	127-18-4	> 50

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air. Get medical attention if symptoms persist.
<b>Skin contact</b>	Wash the skin immediately with soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth and drink plenty of water. Do not induce vomiting. Get medical attention if any discomfort occurs.
<b>Most important symptoms/effects, acute and delayed</b>	Drowsiness and dizziness. Headache. Nausea. Weakness. Unconsciousness. Dry skin. Redness.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water spray, foam, dry powder or carbon dioxide.
<b>Unsuitable extinguishing media</b>	No restrictions known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.
<b>General fire hazards</b>	The product is not flammable.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid inhalation of vapors and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Dike far ahead of liquid spill for later disposal. Collect in containers and seal securely. Containers must be labeled.  Small Spills: Absorb spillage with suitable absorbent material.  Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. This material and its container must be disposed of as hazardous waste.
<b>Environmental precautions</b>	Do not discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Mechanical ventilation or local exhaust ventilation is required. Avoid inhalation of vapors/mist and contact with skin, eyes and clothing. Immediately change drenched clothing. Use appropriate Personal Protective Equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in closed original container in a dry place.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm
	TWA	100 ppm

## US. ACGIH Threshold Limit Values

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
	TWA	25 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*
	3 ppm	Tetrachloroethylene	End-exhaled air	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - Minnesota Haz Subs: Skin designation applies

Tetrachloroethylene (CAS 127-18-4) Skin designation applies.

**Appropriate engineering controls** Mechanical ventilation or local exhaust ventilation is required. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved safety glasses or goggles.

#### Skin protection

**Hand protection** Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

**Other** Wear suitable protective clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	Colorless liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colorless.
<b>Odor</b>	Irritating odor.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	250 °F (121.11 °C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	13 mm Hg (20 °C)
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.619 (25 °C)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0,015 g / 100 g (25 °C)
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Avoid exposure to high temperatures or direct sunlight.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong bases.
<b>Hazardous decomposition products</b>	Carbon monoxide. Carbon dioxide. Hydrogen chloride gas. Phosgene.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system. May cause central nervous system effects.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Mild eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Drowsiness and dizziness. Headache. Nausea. Weakness. Unconsciousness. Dry skin. Redness.

### Information on toxicological effects

<b>Acute toxicity</b>	May cause central nervous system effects.
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Mild eye irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	Due to lack of data the classification is not possible.

**Germ cell mutagenicity** Not available.

**Carcinogenicity** Suspected of causing cancer by inhalation.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Tetrachloroethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

### NTP Report on Carcinogens

Tetrachloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Not available.

<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	May cause damage to liver and kidney. May cause central nervous system effects.
<b>Further information</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	Toxic to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	Not readily degradable.
<b>Bioaccumulative potential</b>	The product is not expected to bioaccumulate.
<b>Partition coefficient n-octanol / water (log Kow)</b>	
Tetrachloroethylene (CAS 127-18-4)	3.4
<b>Mobility in soil</b>	Expected to be moderately mobile in soil.
<b>Mobility in general</b>	The product is insoluble in water.
<b>Other adverse effects</b>	No data available.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose of this material and its container to hazardous or special waste collection point. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
<b>Hazardous waste code</b>	Not regulated.
<b>US RCRA Hazardous Waste U List: Reference</b>	
Tetrachloroethylene (CAS 127-18-4)	U210
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN1897
<b>UN proper shipping name</b>	Tetrachloroethylene solution
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Not available.
<b>Special provisions</b>	IB3, N36, T4, TP1
<b>Packaging exceptions</b>	153
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

### IATA

<b>UN number</b>	UN1897
<b>UN proper shipping name</b>	Tetrachloroethylene solution
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	6L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

<b>UN number</b>	UN1897
<b>UN proper shipping name</b>	TETRACHLOROETHYLENE SOLUTION
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1

**Subsidiary risk** -  
**Label(s)** 6.1  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** Yes  
**EmS** F-A, S-A  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

## 15. Regulatory information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Tetrachloroethylene (CAS 127-18-4) LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Tetrachloroethylene	127-18-4	> 50

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Tetrachloroethylene (CAS 127-18-4)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)** Priority pollutant  
 Toxic pollutant

**Safe Drinking Water Act (SDWA)** 0 mg/l  
 0.005 mg/l

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US. Massachusetts RTK - Substance List

Tetrachloroethylene (CAS 127-18-4)

#### US. New Jersey Worker and Community Right-to-Know Act

Tetrachloroethylene (CAS 127-18-4)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Tetrachloroethylene (CAS 127-18-4)

#### US. Rhode Island RTK

Tetrachloroethylene (CAS 127-18-4)

#### US. California Proposition 65

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Tetrachloroethylene (CAS 127-18-4)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

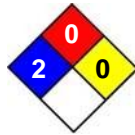
\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	17-February-2015
Revision date	-
Version #	01
Further information	HMIS® is a registered trade and service mark of the NPCA. G - Safety Glasses, Gloves, Vapor Respirator
HMIS® ratings	Health: 2* Flammability: 0 Physical hazard: 0 Personal protection: G

### NFPA ratings



References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
------------	--

Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
------------	--