

TEAM[®] Industrial Services
SAFETY DATA SHEET

1. Product and Company Identification

Material name P.C.E.
Version # 00
Issue date 18-September-2013
Revision date 18-September-2013
Supersedes date -
Chemical description Solvent
CAS # Mixture
Product code 804-0008
Product use Industrial Leak Sealant.
Manufacturer information
Manufacturer/Supplier Team Industrial Services, Inc.
Address 200 Hermann Drive, Alvin, Texas 77511, US
Emergency telephone number CHEMTREC - 24 HOURS

USA: CHEMTREC: 800-424-9300
International: 703-527-3887 (Collect)

2. Hazards Identification

Physical state Liquid.
Appearance Colorless liquid.
Emergency overview WARNING

Possible cancer hazard. Causes skin irritation. May cause respiratory tract irritation. May cause central nervous system effects.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Eye contact. Skin contact. Inhalation. Ingestion.
Eyes Mild eye irritation.
Skin Causes skin irritation.
Inhalation Mist or vapor may irritate the respiratory system. May cause central nervous system effects.
Ingestion May cause discomfort if swallowed.
Chronic effects Possible cancer hazard. May cause damage to liver and kidney.
Signs and symptoms Drowsiness and dizziness. Headache. Nausea. Weakness. Unconsciousness. Dry skin. Redness.
Potential environmental effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
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

First aid procedures
Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin contact Wash the skin immediately with soap and water. Get medical attention if irritation develops or persists.
Inhalation Remove victim to fresh air. Get medical attention if symptoms persist.

Ingestion	Rinse mouth and drink plenty of water. Do not induce vomiting. Get medical attention if any discomfort occurs.
Notes to physician	Treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	No unusual fire or explosion hazards noted.
Extinguishing media	
Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	No restrictions known.
Protection of firefighters	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Protective equipment and precautions for firefighters	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.
Fire fighting equipment/instructions	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.
Hazardous combustion products	Carbon monoxide. Carbon dioxide. Hydrogen chloride gas. Phosgene.

6. Accidental Release Measures

Personal precautions	Avoid inhalation of vapors and contact with skin and eyes. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions	Do not discharge into drains, water courses or onto the ground.
Methods for containment	Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Stop the flow of material, if this is without risk. Dike far ahead of larger spills for later disposal. Collect in containers and seal securely. Containers must be labeled. Small Spills: Absorb spillage with suitable absorbent material. Large Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. This material must be disposed of as hazardous waste.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	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.
Storage	Store in closed original container in a dry place.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

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

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

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

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	678 mg/m3
	TWA	100 ppm
		170 mg/m3 25 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

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

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

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

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	685 mg/m3
	TWA	100 ppm
		170 mg/m3 25 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	1340 mg/m3
	TWA	200 ppm
		1250 mg/m3 100 ppm

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

Personal protective equipment

Eye / face protection Wear approved safety glasses or goggles.

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

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 & Chemical Properties

Appearance	Colorless liquid.
Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	Irritating odor.
Odor threshold	Not available.

pH	Not available.
Vapor pressure	13 mm Hg (20 °C)
Vapor density	Not available.
Boiling point	250 °F (121.11 °C)
Melting point/Freezing point	Not available.
Solubility (water)	0,015 g / 100 g (25 °C)
Specific gravity	1.62 (25 °C)
Flash point	Not applicable.
Flammability limits in air, upper, % by volume	Not applicable.
Flammability limits in air, lower, % by volume	Not applicable.
Auto-ignition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
Incompatible materials	Strong oxidizing agents. Strong bases.
Hazardous decomposition products	Carbon monoxide. Carbon dioxide. Hydrogen chloride gas. Phosgene.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Tetrachloroethylene (CAS 127-18-4)		
Acute		
<i>Inhalation</i>		
LC50	Rat	5000 mg/l, 8 Hours 4100 mg/l, 6 Hours
<i>Oral</i>		
LD50	Rat	2400 mg/kg
Sensitization	Due to lack of data the classification is not possible.	
Acute effects	May cause central nervous system effects.	
Local effects	Possible cancer hazard. Causes skin irritation. May cause respiratory tract irritation. May cause central nervous system effects.	
Chronic effects	May cause damage to liver and kidney. May cause central nervous system effects.	
Carcinogenicity	Possible cancer hazard.	
ACGIH Carcinogens		
Tetrachloroethylene (CAS 127-18-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Tetrachloroethylene (CAS 127-18-4)	2A Probably carcinogenic to humans.	
US NTP Report on Carcinogens: Anticipated carcinogen		
Tetrachloroethylene (CAS 127-18-4)	Reasonably Anticipated to be a Human Carcinogen.	
Symptoms and target organs	Drowsiness and dizziness. Headache. Nausea. Weakness. Unconsciousness. Dry skin. Redness.	
Further information	No other specific acute or chronic health impact noted.	

12. Ecological Information

Ecotoxicological data

Components		Species	Test Results
Tetrachloroethylene (CAS 127-18-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	6.1 - 9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.82 mg/l, 96 hours
Ecotoxicity	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.		
Persistence and degradability	Not readily degradable.		
Bioaccumulation / Accumulation	The product is not expected to bioaccumulate.		
Partition coefficient			
Tetrachloroethylene (CAS 127-18-4)		3.4	
Mobility in environmental media	The product is insoluble in water.		

13. Disposal Considerations

Waste codes	D001
US RCRA Hazardous Waste U List: Reference	
Tetrachloroethylene (CAS 127-18-4)	U210
Disposal instructions	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.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN1897
Proper shipping name	Tetrachloroethylene solution
Hazard class	6.1
Packing group	III
Environmental hazards	III
Marine pollutant	Yes

Additional information:

Special provisions	IB3, N36, T4, TP1
Packaging exceptions	153
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN1897
UN proper shipping name	Tetrachloroethylene solution
Transport hazard class(es)	6.1
Packing group	III
Environmental hazards	Yes
Labels required	6.1
ERG code	6L

IMDG

UN number	UN1897
UN proper shipping name	TETRACHLOROETHYLENE SOLUTION
Transport hazard class(es)	6.1
Packing group	III

Environmental hazards

Marine pollutant	Yes
Labels required	6.1
EmS	F-A, S-A

TDG

UN number	UN1897
Proper shipping name	TETRACHLOROETHYLENE SOLUTION
Hazard class	6.1
Packing group	III
Marine pollutant	Yes

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.

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

Tetrachloroethylene (CAS 127-18-4)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Tetrachloroethylene (CAS 127-18-4) 0.1 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Tetrachloroethylene (CAS 127-18-4) Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Tetrachloroethylene: 100

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
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Section 302 extremely hazardous substance (40 CFR 355, Appendix A)	No
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SARA 311/312 Hazardous chemical	Yes
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Clean Air Act (CAA)	HAPS list
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Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Priority pollutant Toxic pollutant
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Safe Drinking Water Act (SDWA)	0 mg/l 0.005 mg/l
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Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)	Not controlled
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Canadian regulations This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS status	Controlled
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WHMIS classification	D1B - Immediate/Serious-TOXIC D2A - Other Toxic Effects-VERY TOXIC D2B - Other Toxic Effects-TOXIC
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WHMIS labeling

Inventory status

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).

State regulations

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

US - California Hazardous Substances (Director's): Listed substance

Tetrachloroethylene (CAS 127-18-4) Listed.

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

Tetrachloroethylene (CAS 127-18-4) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Tetrachloroethylene (CAS 127-18-4) Listed: April 1, 1988 Carcinogenic.

US - New Jersey RTK - Substances: Listed substance

Tetrachloroethylene (CAS 127-18-4) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Tetrachloroethylene (CAS 127-18-4) Special hazard.

US. Massachusetts RTK - Substance List

Tetrachloroethylene (CAS 127-18-4) Listed.

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

Tetrachloroethylene (CAS 127-18-4) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

Tetrachloroethylene (CAS 127-18-4) Listed.

16. Other Information

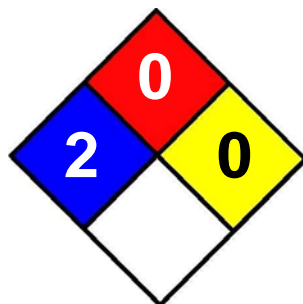
Further information

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



Disclaimer

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