

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 10C5 Cement for PVC Plastic Pipe
PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe
SUPPLIER: IPS Corporation
 777 McKay Road,
 Pickering, Ontario L1W 3A3
 Phone: 800 888-8312

EMERGENCY: Transportation: CANUTEC, 1 (613) 996-6666

Medical: CANUTEC, 1 (613) 996-6666

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Health			Environmental		
Serious Eye Damage	Category 2A	Specific Target Organ Toxicity (single exposure)	Category 3	Acute Toxicity:	None Known
Skin Irritation:	Category 2			Chronic Toxicity:	None Known
Carcinogenicity	Category 2			Physical	
				Flammable Liquid	Category 2



Signal Word: DANGER

Hazard Statements

H225: Highly flammable liquid and vapor
 H302: Harmful if swallowed
 H315: Causes skin irritation
 H319: Causes serious eye irritation
 H332: Harmful if inhaled
 H335: May cause respiratory irritation
 H336: May cause drowsiness or dizziness
 H351: Suspected of causing cancer

Precautionary Statements

P201: Obtain special instructions before use
 P202: Do not handle until all safety precautions have been read and understood.
 P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
 P233 + P403: Keep container tightly closed. Store in a well-ventilated place.
 P240 + P241: Ground/bond container and receiving equipment. Use explosion-proof equipment.
 P242 + P243: Use only non-sparking tools. Take precautionary measures against static discharge.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray
 P501: Dispose of contents/ container to an approved waste disposal plant.

Response

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/Medical Attention
 P331: Do NOT induce vomiting.
 P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).
 P304+340: IF INHALED: Remove person to fresh air and keep 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.
 P308+313: IF exposed or concerned: Get medical advice/attention.

Percentage of Ingredients Unknown of Acute Dermal Toxicity: 0%
Physical Hazards Not Otherwise Classified

Vapours may form explosive mixture with air.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS		REACH		CONCENTRATION
		EINECS	Registration Number		% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	01-2119444314-46-0000		40 - 50
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	01-2119457290-43-0000		20 - 30
Cyclohexanone	108-94-1	203-631-1	01-2119453616-35-0000		5 - 15

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
 * Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR312).
 # Indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, dry chemical powder or appropriate foam.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon and smoke

	HMS	NFPA	
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	1	1	3-Serious
PPE	B		4-Severe

Unusual Fire and Explosion Hazards: Highly flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Can be ignited by static discharge. May travel a considerable distance to a source of ignition and flash back to a leak or open container. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire hazard.

Protection for Firefighters: Evacuate area. Fight fire from a safe distance or a protected location. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Before entry, especially into confined areas, use an appropriate monitor to check for: flammable or explosive atmosphere. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep away from heat, sparks and open flame. Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment. Prevent contact with skin or eyes (see section 8).
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Contain spill using noncombustible material such as vermiculite, earth or sand. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.
Materials not to be used for clean up: Aluminum or plastic containers. Do not use absorbents.

SECTION 7 - HANDLING AND STORAGE

Handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Electrically bond and ground equipment. Ground clips must contact bare metal. Use non-sparking tools. Wash hands thoroughly after handling this material. No smoking. Avoid breathing in this product. Do not get in eyes, on skin or on clothing. Do not swallow. Avoid exposure during pregnancy and while nursing. Only use where there is adequate ventilation. Avoid generating vapours or mists.
Storage: Keep storage area separate from populated work areas. Store in a cool, dry, well ventilated area, out of direct sunlight and away from incompatible materials and any source of ignition. Ventilation fans and electrical equipment should be non-sparking. Follow all precautionary information on container label, product bulletins and solvent cementing literature.
ATTENTION: Emptied containers may retain hazardous residue and explosive vapours. Keep away from heat, sparks and flames. Do not cut puncture or weld near this container. Follow label warning until container is thoroughly cleaned or destroyed.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH	ACGIH	OSHA	Ontario	Ontario STEL	CAL/OSHA	CAL/OSHA	CAL/OSHA
		8-hr TLV	15-min STEL	8-hr PEL	OEL-TWA	/ Ceiling	8-hr PEL	Ceiling	15-min STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm

Engineering Controls: Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground. Provide safety shower in work area, if contact or splash hazard exists.
Monitoring: Maintain breathing zone airborne concentrations below exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

Skin Protection:

Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion. Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.

Respiratory Protection:

Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Physical State:	Liquid
Odour:	Ketone	Odor Threshold:	0.88 ppm (Cyclohexanone)
pH:	Not Applicable	Percent Volatile by Volume:	86%
Melting/Freezing Point:	-108.5°C (-163.3°F) Based on first melting component: THF	Boiling Range:	66°C (151°F) to 156°C (313°F)
Boiling Point:	66°C (151°F) Based on first boiling component: THF	Evaporation Rate:	> 1.0 (BUAC = 1)
Flash Point:	-14°C (-6.8°F) TCC based on THF	Flammability:	Category 2
Specific Gravity:	0.916 @ 23°C (73°F)	Flammability Limits:	LEL: 1.1% based on Cyclohexanone UEL: 11.8% based on THF
Solubility:	Solvent portion soluble in water. Resin portion separates out.	Vapor Pressure:	129 mm Hg @ 20°C (68°F) based on THF
Partition Coefficient n-octanol/water:	Not Available	Vapor Density:	>2 (Air = 1)
Auto-ignition Temperature:	321°C (610°F) based on THF	Other Data: Viscosity:	Medium bodied
Decomposition Temperature:	Not Applicable		
VOC Content:	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 510 g/l.		

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Normally stable.
Reactivity:	THF - Vapours may form explosive mixture with air.
Hazardous decomposition products:	None in normal use. When forced to burn, this product gives off oxides of carbon and smoke.
Conditions to avoid:	High temperatures. Open flames, sparks, static discharge, heat and other ignition sources.
Incompatible Materials:	Oxidizing agents (e.g. peroxides).

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin Contact
Aspiration Hazard: May be drawn into the lungs (aspirated) if swallowed or vomited. Can cause lung damage if aspirated based on human experience.

Acute symptoms and effects:

Inhalation:	Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Eye Contact:	Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.
Skin Contact:	Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Ingestion:	May cause nausea, vomiting, diarrhea and mental sluggishness.

Chronic (long-term) effects:

(THF) Category 2 Carcinogen
 (MEK) Low level chronic exposure has been shown to cause decreased memory and impairment of the central nervous system.

Health Hazards Not Otherwise Classified: This material may cause defatting and irritation of skin (Dermatitis) upon prolonged or repeated contact.

Respiratory or Skin Sensitization:

Not Applicable

Toxicity:	LD50	LC50	Target Organs
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat), Dermal: > 2,000 mg/kg (rat)	Inhalation: 3 hrs. 21,000 mg/m ³ (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m ³ (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	Not Established

Acute Toxicity

Methyl Ethyl Ketone (MEK)	Acute (Oral) Toxicity: None	Acute (Dermal) Toxicity: None	Acute (Inhalation) Toxicity: None
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Specific Target Exposure Toxicity (Single Exposure): Category 3

Specific Target Exposure Toxicity (Repeated Exposure): Not Applicable

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

Carcinogenicity:

(THF) Category 2

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Acute Aquatic Toxicity	Pimephales promelas (fathead minnow): 96-hour	Daphnia magna (water flea): 48-hour	Pseudokirchneriella subcapitata (microalgae) Growth rate inhibitor
Tetrahydrofuran (THF)	2160 mg/L	No Data Available	3,700 mg/l - 192 hour
Methyl Ethyl Ketone	> 100 mg/L	> 100 mg/L	2,029 mg/l - 96 hour
Cyclohexanone	527 mg/L	> 100 mg/L	0.925 mg/l - 72 hour

Mobility in Soil: If released into the environment, this product can move rapidly through the soil.

Degradability: Does not degrade rapidly based on quantitative tests. (Tetrahydrofuran)

Bioaccumulation: This product and its degradation products are not known to bioaccumulate..

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with applicable Federal, State, Provincial, and Local regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name:	Adhesives	EXCEPTION for Ground Shipping DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package. Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D" .
Hazard Class:	3	
Secondary Risk:	None	TDG INFORMATION
Identification Number:	UN 1133	
Packing Group:	PG II	TDG CLASS: FLAMMABLE LIQUID 3
Label Required:	Class 3 Flammable Liquid	SHIPPING NAME: ADHESIVES
Marine Pollutant:	NO	UN NUMBER/PACKING GROUP: UN 1133, PG II
WHMIS Class	B2 D2B	

SECTION 15 - REGULATORY INFORMATION

Precautionary Label Information:	Highly Flammable, Irritant, Carc. Cat. 2	Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
Symbols:	F, Xi	
Risk Phrases:	R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness
Safety Phrases:	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advise immediately and show this container or label.
Compliance Statement:	This SDS was prepared to be in accordance with: US OSHA Hazard Communication Standard 29 CFR 1910.1200 (Rev 2012) Canadian Workplace Hazardous Materials Information System (WHMIS) 2015	Domestic Substances List / Non-Domestic Substances List (DSL) / (NDSL) All ingredients are listed on the DSL/NDSL.

SECTION 16 - OTHER INFORMATION

Specification Information:		
Department issuing data sheet:	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
E-mail address:	<EHSinfo@ipscorp.com>	
Training necessary:	Yes, training in practices and procedures contained in product literature.	
Reissue date / reason for reissue:	12/31/201+G19 / Updated GHS Standard Format	
Intended Use of Product:	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.