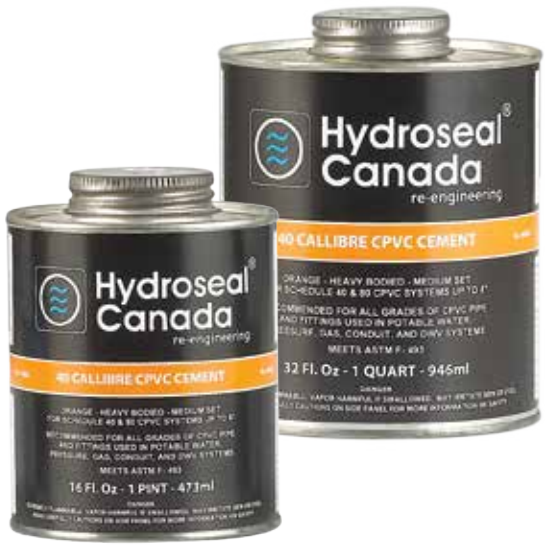

General description

Hydroseal® Canada 40 CALLIBRE CPVC CEMENT is an orange, heavy bodied, medium setting, high strength CPVC solvent cement for all classes and schedules of CPVC tube and fittings with interference fit through 8 inch diameter, including Schedule 80. It has good gap filling properties and its medium set allows more working time in warm weather.

Application

Hydroseal® Canada 40 CALLIBRE CPVC CEMENT is for use on cold and hot water systems up to 180°F (82°C) maximum, in industrial tubing, residential, recreational vehicles and mobile homes plumbing. It can be used on copper tube size CPVC tube and fittings.

Detailed directions on making solvent cemented joints are printed on the container label. An installation DVD/CD covering solvent cementing is available. It not only describes the basic principles of solvent cementing, but also covers the handling, storage and use of our products. It is highly recommended that the installer review the instructions supplied by the tube and fitting manufacturer.

Notes:
Hydroseal® Canada solvent cements must never be used in a CPVC system using or being tested by compressed air or gases; including air-over-water booster.

Standards and certification listings

- Meets ASTM D 2846 and F 493 Standard.
- Listed by NSF International for compliance with ASTM D 2846, NSF/ANSI Standard 14 for use on potable water, drain, waste, vent and sewer Applications.

Specifications

Color:	Orange
Resin:	CPVC
Specific Gravity:	0.972 ± 0.04
Brookfield Viscosity:	Minimum 1,800 CP @ 73 ± 2°F (23 ± 1°C)

Shipping:

For One Liter and Above
Proper Shipping Name: Adhesive
Hazard Class: 3
Identification Number: UN 1133
Packing Group: II
Label Required: Flammable Liquid

For Less than One Liter
Proper Shipping Name: Consumer Commodity
Hazard Class: ORM-D

Shelf life

2 years in tightly sealed containers. The date code of manufacture is stamped on the bottom of the container. Stability of the product is limited by the evaporation of the solvent when the container is opened. Evaporation of solvent will cause the cement to thicken and reduce its effectiveness. Adding of thinners to change viscosity is not recommended and may significantly change the properties of the cement.

Quality assurance

Hydroseal® Canada 40 CALLIBRE CPVC CEMENT is carefully evaluated to assure that consistent high quality is maintained. Fourier transform infrared spectroscopy, gas chromatography, and additional in depth testing ensures each batch is manufactured to exacting standards. A batch identification code is stamped on each can and assures traceability of all materials and processes used in manufacturing this solvent cement.

Availability

PART	SIZE	CPVC	40 CALLIBRE				
		DESCRIPTION	COLOR	CARTON	N.W(KGS)	G.W (KGS)	VOL (CU/FT)
0601.8400.0120	4 oz	40 CALLIBRE	ORANGE	24	2.40	3.60	0.29
0601.8400.0250	8 oz			24	4.80	7.20	0.41
0601.8400.0500	16 oz			12	5.40	6.60	0.42
0601.8400.1000	32 oz			12	10.80	10.20	0.78

ACCESSORIES
SAFETY DATA SHEET - CPVC 40 CALLIBRE FOR CPVC PLASTIC TUBE

SECTION

UNIVERSAL PIPING advanced fluidity

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **CPVC 40 Callibre for CPVC Plastic Tube**
PRODUCT USE: Low VOC Solvent Cement for CPVC Plastic Tube
SUPPLIER:

MANUFACTURER: HYDROSEAL CANADA INCORPORATED
108 West 13th Street. Wilmington, New Castle. Delaware - 19801
United States of America. Phone: +1-302-298-0822, Fax: +1-302 -298-0824

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International)
Medical: Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:   **OR**  

Signal Word:
Danger

WHMIS CLASSIFICATION: CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
H319: Causes serious eye irritation	P261: Avoid breathing dust/fume/gas/mist/vapors/spray
H332: Harmful if inhaled	P280: Wear protective gloves/protective clothing/eye protection/face protection
H335: May cause respiratory irritation	P337+P313: Get medical advice/attention
H336: May cause drowsiness or dizziness	P403+P233: Store in a well ventilated place. Keep container tightly closed
EUH019: May form explosive peroxides	P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	30 - 60
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	5 - 20

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 (40CFR372).
# 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: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, hydrogen chloride and smoke
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	0-Minimal
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

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: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.
Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.
Storage: Store in ventilated room or shade below 33°C (90°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
Cyclohexanone	20 ppm	50 ppm	50 ppm	

Engineering Controls: Use local exhaust as needed.
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:	Orange or gray, heavy syrupy liquid
Odor:	Ketone
pH:	Not Applicable
Melting/Freezing Point:	-108.5°C (-163.3°F) Based on first melting component: THF
Boiling Point:	66°C (151°F) Based on first boiling component: THF
Flash Point:	-20°C (-4°F) T.C.C. based on Acetone
Specific Gravity:	0.995 @23°C (73°F)
Solubility:	Solvent portion soluble in water. Resin portion separates out.
Partition Coefficient n-octanol/water:	Not Available
Auto-ignition Temperature:	321°C (610°F) based on THF
Decomposition Temperature:	Not Applicable
VOC Content:	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: <= 490 g/l.

Odor Threshold:	0.88 ppm (Cyclohexanone)
Boiling Range:	66°C (151°F) to 156°C (313°F)
Evaporation Rate:	> 1.0 (BUAC = 1)
Flammability:	Category 2
Flammability Limits:	**LEL:** 1.1% based on Cyclohexanone **UEL:** 11.8% based on THF
Vapor Pressure:	129 mm Hg @ 20°C (68°F)based on THF
Vapor Density:	>2.0 (Air = 1)
Other Data: Viscosity:	Heavy bodied

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Hazardous decomposition products:	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
Conditions to avoid:	Keep away from heat, sparks, open flame and other ignition sources.
Incompatible Materials:	Oxidizers, strong acids and bases, amines, ammonia

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Inhalation, Eye and Skin Contact
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:	None known to humans

Toxicity:	LD_{50}	LC_{50}
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m³ (rat)
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m³ (rat)
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)

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

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	None Known
Mobility:	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of <= 490 g/l.
Degradability:	Biodegradable
Bioaccumulation:	Minimal to none.

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name:	Adhesives
Hazard Class:	3
Secondary Risk:	None
Identification Number:	UN 1133
Packing Group:	PG II
Label Required:	Class 3 Flammable Liquid
Marine Pollutant:	NO

EXCEPTION for Ground Shipping	
DOT Limited Quantity Consumer Commodity:	Up to 5L per inner packaging, 30 kg gross weight per package. Depending on packaging, these quantities may qualify under DOT as "ORM-D" .

TDG INFORMATION	
TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

SECTION 15 - REGULATORY INFORMATION

Precautionary Label Information:	Highly Flammable, Irritant	Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
Symbols:	F, Xi	
Risk Phrases:	R11: Highly flammable. 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:	S2: Keep out of the reach of children. 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.

SECTION 16 - OTHER INFORMATION

Specification Information:	
Department issuing data sheet:	Hydroseal Laboratories
E-mail address:	info@hydroseal.ca
Training necessary:	Yes, training in practices and procedures contained in product literature.
Reissue date / reason for reissue:	12/14/2011 / Updated GHS Standard Format
Intended Use of Product:	Solvent Cement for CPVC Plastic Tube

All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).

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.