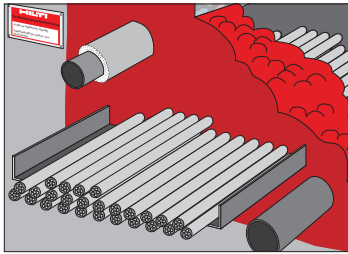


CP 620

Fire Foam



System Advantage / Customer Benefits

- One solution for various applications
- Easy handling for difficult to reach applications
- One step application
- Paintable
- Virtually impervious to smoke
- Mold resistant
- No additional materials required
- Explosion resistant
- Excellent water vapor impermeability
- Meets UL requirement rating for class I W rating

Installation instructions for CP 620

Application

Before handling read the Material Safety Data Sheet for detailed usage and health information. Refer to the UL/cUL Fire Resistance Directory for specific application details.

1-4.

Prepare dispenser and cartridges as shown below. The Fire Foam from the first few strokes of the dispenser should be discarded until the Fire Foam in the mixer has a consistent red color.

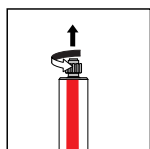
5. Apply the CP620 Fire Foam in the opening.

- Begin applying CP620 Fire Foam at the back of the opening and work toward the front. Fill the opening completely with CP620 Fire Foam.
 - When dispensed slowly, the Fire Foam can be easily built up.
 - When dispensed quickly, the consistency of the Fire Foam is more liquid allowing it to flow better between the cables.
- Note: The CP620 Fire Foam becomes warm for a short time after application.

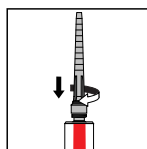
6. For maintenance reasons, the application can be permanently marked with an installation plate. Mark the installation plate and fasten it in a visible position next to the seal.

Re-installing cables or pipes

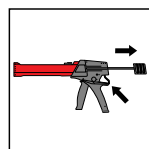
- Additional cables or pipes can be installed later without difficulty.
- Use a suitable tool to create an opening (screwdriver, drill bit, etc.). Push the cable or pipe through and then seal the remaining opening carefully with CP 620 Fire Foam.



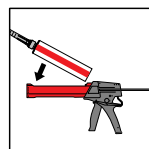
1. Hold the cartridge in the upright position and unscrew the cap.



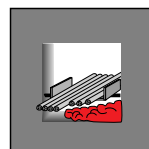
2. Fit the mixer and screw in a clockwise motion until secure.



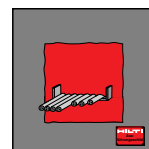
3. Release the dispenser and pull back the piston rod.



4. Insert the cartridge in the dispenser.



5. Apply CP 620 Fire Foam, building up a seal by working from the back towards the front.



6. Attach the installation plate (if required).

Product description

- Innovative firestopping solution for complex applications

Product features

- Up to 6 times expansion
- Re penetrable
- Cures within 60 seconds

Areas of application

- Sealing small- to medium-sized openings
- Permanent fire seal for cables and cable trays
- Permanent fire seal for non-combustible pipes
- Permanent fire seal for combustible pipes when used in conjunction with Hilti Wrap Strips
- Permanent fire seal where cables, steel, copper, cast iron or plastic pipes all pass through the same opening

For use with floor and wall assemblies

- Concrete, drywall, masonry

Examples

- Power cables and cables of various types and diameters
- Non-combustible pipes (steel, cast iron, copper)
- Combustible pipes when used in conjunction with CP 645 Wrap Strips
- Multiple penetrations
- Insulated metal pipes

bit, etc.). Push the cable or pipe through and then seal the remaining opening carefully with CP 620 Fire Foam.

Notes

- The CP 620 Fire Foam can be cut back to no less than the minimum specified installation depth (see applicable UL/cUL systems for depths).
- Pieces of cured excess CP 620 Fire Foam which have been cut off can be laid in the next opening and fresh CP 620 Fire Foam can be applied around these.

Safety precautions

- Keep out of reach of children.
- Wear protective clothing, safety glasses and gloves when installing.
- Request a copy of Material Safety Data System and read all usage and precautionary information.

Storage

- Store only in the original packaging in a dry place at a temperature of 40°F to 77°F (5°C to 25°C). See technical data for application and substrate temperatures. Partly-used cartridges can be stored with mixer attached until they are required again. When re-using a partially used cartridge, simply attach a new mixer and dispense accordingly.

Not for use

- Exposed to weather
- Exposed to UV

CP 620

Technical Data

At 73°F (23°C) and 50% relative humidity

Color

Red

Cartridge content

10.2 oz (300 ml)

Fire Foam Yield

Up to 110 in³

Application temperature

50°F to 86°F (10°C to 30°C)

Temperature resistance of cured foam

-22°F to 212°F (-30°C to 100°C)

Minimum temperature

Substrate 32°F (0°C)

Cartridge 50°F (10°C)

Curing

Non-tacky after Approx. 35 seconds

Ready to cut after Approx. 1 minute

Thermal insulation (R-value)

2.8–3.0 per inch of thickness

Sound transmission classification (ASTM E90-97)

50

Structure-borne sound insulation

Pipe/wall 30–50%

Surface burning characteristics (ASTM E84-01)

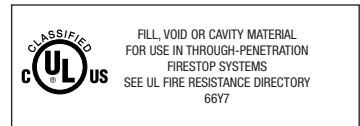
Flame spread: 0

Smoke development: 15

Tested in accordance with

- UL 1479
- ASTM E814
- ASTM E84
- CAN4-S115-95M
- ULC-S115-95M

Internationally tested and approved



latest product information : www.ca.hilti.com

ordering information see page:

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MSDS No.: 272C
 Revision No.: 003
 Revision Date: 08/17/04
 Page: 1 of 2

Product identifier: CP 620 Fire Foam

Description / Use: Polyurethane foam for firestopping fire compartments, cables, cable trays and nonflammable pipes
 Supplier: Hilti (Canada) Corporation, 6790 Century Avenue, Suite #300, Mississauga, Ontario L5N 2V8
 Originator: Hilti, Inc., P. O. Box 21148, Tulsa, Oklahoma, USA 74121
 Emergency number: Chem-Trec: 1 800 424 9300

INGREDIENTS INFORMATION

Ingredient	CAS Number	% (wt.)	LC ₅₀ , (rat)	LD ₅₀ (rat)	TLV	STEL
Part A:						
Amino, polyester, propoxylated polyols	N/E; Mixture	30 - 40	N/Av	N/Av	N/E	N/E
Graphite, expanded	012777-87-6	10 - 20	N/Av	N/Av	N/E	N/E
Polyester polyol	025038-59-9	10 - 20	N/Av	N/Av	N/E	N/E
Ammonium polyphosphate	068333-79-9	10 - 20	N/Av	N/Av	N/E	N/E
Bromated polyester polyols	N/E; Mixture	05 - 10	N/Av	N/Av	N/E	N/E
Zinc borate	138265-88-0	01 - 05	N/Av	N/Av	N/E	N/E
Ethoxylated polyol	083016-70-0	01 - 05	N/Av	N/Av	N/E	N/E
Iron oxide pigment	001309-37-1	01 - 05	TCLD: 0.5 mg/m ³ /24H	N/Av	5 mg/m ³	N/E
Part B:						
Polymeric diphenylmethane diisocyanate	009016-87-9	85 - 95	490 mg/m ³ /4H	49000 mg/kg	N/E	N/E
Tris(2-chloroisopropyl) phosphate	013674-84-5	05 - 15	N/Av	1500 mg/kg	N/E	N/E

PHYSICAL PROPERTIES

Appearance / Physical state:	Reddish liquid / foam.	Odour:	Negligible.
Specific gravity (at 20°C):	1.2 - 1.4	VOC Content:	15.0 g/L
Vapour pressure (at 20°C):	Not determined.	Vapour density:	Not determined.
Evaporation rate:	Not determined.	Boiling point:	Not determined.
Freezing point:	Not determined.	pH:	Not determined.
Coefficient of H2O / oil distrib:	Not determined.	Solubility in water:	Insoluble.

FIRE AND EXPLOSION DATA

Flash point / Method:	Not applicable.	Flammable limits:	Not applicable.
Conditions of flammability:	Fire retardant foam; will ignite at temperatures exceeding 400° C.		
Auto-ignition temperature:	Not determined.		
Means of extinction:	Carbon Dioxide, Dry Chemical, Foam.		
Special fire fighting procedures:	Isocyanates react with water to release CO ₂ .		
Hazardous combustion products:	Thermal decomposition can yield CO, CO ₂ , HCl, HBr, HCN, and NO _x .		
Sensitivity to mechanical impact / static discharge:	Not susceptible to mechanical impact or to a static discharge.		

REACTIVITY DATA

Stability:	Reacts (i.e. expands at a ratio of > 7:1 to form a polyurethane foam) upon contact with air. Contact with moisture or water will also cause material to polymerize (non-violently).
Conditions of reactivity:	Reacts with water or moisture.
Incompatible materials:	Alcohols, strong bases, alkali metal compounds. Reacts with water (nonviolently).
Hazardous decomposition products:	Not determined.

TOXICOLOGICAL PROPERTIES

Routes of exposure:	<input checked="" type="checkbox"/> Skin contact <input type="checkbox"/> Skin absorption <input checked="" type="checkbox"/> Eye contact <input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion
Acute effects of exposure:	Eyes: Can adhere to cornea. Skin: Can adhere to the skin. Can cause irritation and possibly sensitization; e.g. itching, swelling, rashes, etc. Inhalation: Vapor generated when heated to temperatures > 100° F can cause irritation of the breathing tract. Ingestion: Effects of ingestion have not been determined. Not a likely route of exposure. No ill effects expected.

INTRODUCTION

APPLICATIONS / PRODUCTS

SYSTEM DETAILS

ESTIMATING TABLES / TECH DATA

MSDS No.: 272C
Revision No.: 003
Revision Date: 08/17/04
Page: 2 of 2

Exposure limits:	See "Ingredients" section above.
Chronic effects of exposure:	Some individuals can develop an allergic (asthmatic-like) response. Should this occur, immediately move to fresh air and avoid future use of this product.
Synergistic materials:	None known.

FIRST AID MEASURES

Eyes:	Immediately flush with plenty of water and seek medical attention.
Skin:	Cured material is difficult to remove. Remove immediately with soap and warm water. Acetone may remove uncured material. If material has hardened, use hand cleaner or a light mineral oil. If still unable to remove, buff off with a pumice stone.
Inhalation:	Move victim to fresh air. Call a physician if symptoms persist.
Ingestion:	Do not induce vomiting unless large amounts are ingested. If conscious, give 1 to 2 glasses of water to drink. <u>Never</u> give anything by mouth to an unconscious person. Contact a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Engineering controls:	General (natural or mechanically induced fresh air movements).
Eye protection:	Goggles recommended; safety glasses with side shields as a minimum.
Skin protection:	Cloth gloves are suitable.
Respiratory protection:	None normally required. If MDI concentrations exceed recommended levels, a supplied air respirator is required.
Other:	No additional measures are normally required.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling procedures and equipment:	For industrial use only. Use with adequate ventilation. Avoid contact. Material will adhere to eyes and skin. Always wash thoroughly after handling chemical products. Follow label / use instructions.
Storage requirements:	Keep out of reach of children. Keep dry. Do not store in direct sunlight. Keep from freezing. Store between 10° and 32° C.
Spill, leak or release:	Product will adhere to most surfaces. Immediately clean up spilled material before it hardens. Place in a container for proper disposal.
Waste disposal:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, provincial, and federal safety, health and environmental regulations.
Special shipping instructions:	Avoid temperature extremes. Keep from freezing.

REGULATORY INFORMATION

WHMIS classification:	D2A, D2B
HMIS codes:	Health 2, Flammability 0, Reactivity 1, PPE B (Goggles, Gloves)
TDG shipping name:	Not regulated

PREPARATION INFORMATION / CONTACTS

Prepared by:	Hilti, Inc., Tulsa, OK USA	Emergency phone number:	1 800 424 9300
Customer Service:	Hilti (Canada) Corporation, Mississauga, Ontario; 1 800 363 4458		
Health / Safety contacts:	Hilti, Inc., Tulsa, OK USA; 1 800 879 6000, Jerry Metcalf (x6704)		
Abbreviations used:	N/E = None Established. N/A = Not Applicable. N/Av = Not Available. H= Hours. HMIS = Hazardous Materials Identification System		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

Certificate of Compliance

Certificate Number **20060214-R132401**
Report Reference **2006 February 14**
Issue Date **2006 February 14**

Page 1 of 1



Issued to: **Hilti, Inc.**
5400 S 122ND East Ave
Tulsa, OK 74146 USA


This is to certify that representative samples of **Fill, Void or Cavity Materials**
CP 620

Have been investigated by Underwriters Laboratories Inc.® in accordance with the Standard(s) indicated on this Certificate.


Standard(s) for Safety: **ANSI/UL 1479, CAN/ULC-S115-05**

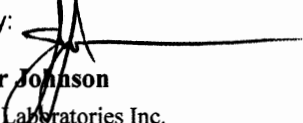
Additional Information: **CP 620 Fire Foam for in Through-Penetration Firestop Systems as currently described in the UL Fire Resistance Directory.**

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes: UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product

Issued by:

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Underwriters Laboratories Inc.

Reviewed by:

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