# Childers

Mastics, Coatings, Adhesives, Sealants

#### DESCRIPTION

**CP-38 AF** is a water-based, high solids, flexible, vapor retarder coating for use over many types of thermal insulation including polystyrene foam. It can also be used over dry concrete and insulating cement to provide a vapor retarder coating.

**CP-38 AF** has added fungus resistance for use in high humidity areas to resist mold, fungus and mildew growth on its surface and protect the insulation system from their discoloring and deteriorating effects.

**CP-38 AF** is formulated for indoor and light duty outdoor commercial use. It is UV resistant and has a mild latex "paint type" odor. CP-38 AF is designed for use on pipes, vessels, ducts and equipment operating below ambient temperatures. It is non-flammable in the wet state and fire resistive when dry.

**CP-38 AF** is ideal for use over ASJ, FRK and FSK jackets and board facings to give a vapor retarding seal at joints, laps and over staples and weld pin punctures. It can also be used as a duct board closure sealant.

#### LIMITATIONS

Store and apply between 40°F (4°C) and 100°F (38°C); protect from freezing until dry.

Always test foil and paper facings for acceptable adhesion before using.

Outdoor horizontal surfaces must always drain completely. A pitch of at least 1/2 inch per foot (4 cm/m) is required.

To resist rain washoff, allow at least 12 hours drying time above  $50^{\circ}$ F ( $10^{\circ}$ C), with a relative humidity of 50%. Higher humidity and/or lower temperature may retard drying.

Do not apply over 1/8" (3.2 mm) wet film thickness.

Select CP-38 in white color for use over polystyrene insulation outdoors. May weather to an off-white color after exposure.

This product does not protect users or others against bacteria, viruses, germs or other disease organisms. It does not take the place of normal cleaning and disinfecting procedures.

#### CERTIFIED

- MAS Certified Green®
- California Dept. of Public Health Standard Method v1.2
- VOC Emissions and Content requirements to contribute to
  **I FED V4** EQ Credit: Low Emitting Materials Baints
  - **LEED V4** EQ Credit: Low Emitting Materials Paints and Coatings
- VOC Content: 36 g/l, less water and exempt solvents
- Collaborative for High Performance Schools EQ 7.1
- Meets the performance requirements for MIL-PRF-19565C, Type II using method ASTM E96, Procedure A permeance

### **CP-38 AF CHIL-LOW**<sup>™</sup> Vapor Retarder Coating (Fungus Resistant)

#### COLOR

White

#### WET WEIGHT (ASTM D1475)

11.5 lbs. (1.38 kg/liter)

AVERAGE NON-VOLATILE (ASTM D2369)

58% by volume (70% by weight)

#### SERVICE TEMPERATURE LIMITS

Temperature at coated surface. -20°F to 180°F (-29°C to 82°C)

#### DRYING TIME 73°F (23°C), 50% RH

To Touch: 4 hours Through: 24 hours

#### COVERAGE

Subject to the surface being coated. Wet coverages shown below are for smooth non-porous surfaces. Porous or rough surfaces will require higher gallonage to attain required dry thickness. 4 gallons/100 sq. ft.  $(1.6 \text{ I/m}^2) 0.064$  in. wet thickness (1.6 mm)

#### WATER VAPOR PERMEANCE (TYPICAL AVERAGE) Tested with reinforcing mesh

ASTM E96, PROCEDURE A:

0.05 perms (0.03 metric perms) at 47 mils dft (1.2 mm)

0.03 perms (0.02 metric perms) at 73 mils dft (1.9 mm) ASTM F1249: 0.08 perms (0.05 metric perms) at 37 mils dry film thickness (0.94 mm). Tested at 100°F (38°C) and 90% RH

Meets the permeance requirements of ASTM C755 for below ambient vapor retarder coatings.

#### FUNGAL RESISTANCE (ASTM D5590)

Rating = 0

#### WET FLAMMABILITY

Flash Point: None to boiling, 212°F (100°C)

15

30

#### SURFACE BURNING CHARACTERISTICS (ASTM E84)

Flame Spread Smoke Develop Surface Number of Coats Coverage

Inorganic reinforced cement board 1 25 sq. ft./gal. in 4" strip



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#### H.B. Fuller Construction Products Inc.

Customer Service 800-832-9002

1105 South Frontenac Street Aurora, IL 60504 Fax 800-952-2368

## Suggested Specifications

# Suggested specifications for vapor sealing insulation on low temperature equipment, chilled water or refrigerated piping and fittings.

The insulation on all piping, fittings, and equipment shall be vapor sealed with Childers<sup>®</sup> CP-38 AF CHIL-LOW<sup>™</sup> Vapor Retarder Coating. The first coat shall be a tack coat applied at a coverage rate of 2 U.S. gals./100 sq. ft. (0.8 l/m<sup>2</sup>). While still wet, a layer of CHIL-GLAS<sup>®</sup> #10 Glass Fiber Reinforcing Mesh shall be embedded, with all seams overlapped a minimum of 2" (5.08 cm). A finish coat at a coverage rate of 2 U.S. gals./100 sq. ft. (0.8 l/m<sup>2</sup>) shall be applied so that the total wet film thickness is a minimum of 0.064" (1.6 mm). This will provide a minimum dry film thickness of 0.037" (0.9 mm).

#### NOTES TO SPECIFYING ENGINEER

1. Childers<sup>®</sup> CP-38 AF CHIL-LOW<sup>™</sup> Vapor Retarder Coating is white in color and should be specified where white All Service Jacketing (ASJ) or other white coatings/finishings are specified on the adjoining pipe or equipment insulation.

2. Do not use over copper clad wire.

3. All horizontal surfaces must be sloped at least 1/2 inch per foot (4 cm/m) to assure water run-off and prevent the ponding of rain water and melting snow or ice.

## **Application Guide and Suggested Procedures**

#### 1. USE OF MATERIAL

Stir well. DO NOT THIN. Apply only to clean, dry, oil-free surfaces. Keep container closed when not in use.

## 2. APPLICATION – INDOOR AND LIGHT DUTY OUTDOOR

To prevent water vapor and moisture infiltration, proper and complete flashing is required. Follow flashing specifications.

- Apply tack coat of CP-38 AF CHIL-LOW<sup>™</sup> Vapor Retarder Coating at 2 gallons per 100 sq. ft. (0.8 l/m<sup>2</sup>).
- Embed CHIL-GLAS<sup>®</sup> #10 membrane into the wet tack coat. Smooth membrane to avoid wrinkles and overlap all seams at least two inches (5 cm). Apply finish coat of CP-38 AF coating, within 1/2 hour of the tack coat application, at 2 gallons per 100 square feet (0.8 l/m<sup>2</sup>).
- 3. This application shall provide a minimum dry thickness of 37 mils (0.9 mm).

#### 3. BRUSH

Use a good brush, suitable for water-based paints, making strokes as long as possible over the surface. Apply with full brush and spread out evenly. Do not overwork.

#### 4. SPRAY

CP-38 AF CHIL-LOW<sup>™</sup> Vapor Retarder Coating may be airless spray applied. For spray equipment information, please consult Airless Spray Recommendations or contact your spray equipment supplier. Average viscosity range: 60,000 – 90,000 cps. Corrosion resistant pumps and fittings are suggested.

#### 5. CLEAN UP

Use fresh water to clean brushes and equipment before product dries. Dry product may be removed with hot soapy water (with ammonia added) or strong solvents such as chlorinated solvent (non-flammable) or xylol (flammable).

#### CUSTOMER SERVICE: 800-832-9002

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ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of our products is twelve months from date of shipment to the original purchaser or as otherwise provided on the certificate of analysis.

For professional use only. Keep out of reach of children. Consult Safety Data Sheet and container label for further information.