



# FLAME CONTROL NO. 70

(Fire Retardant Intumescent Mastic)

For Cable Fire Protection

(Grouped Electrical, Control & Communication Cables and their supporting trays)

## DESCRIPTION:

Flame Control No. 70 is a specially formulated asbestos free, water base, reinforced thermal insulating intumescent mastic coating, that affords maximum fire protection to grouped electrical, control & communication cables, and their supporting trays; used wherever it is either necessary or desirable to increase the cable's fire endurance time, minimize the propagation of fire along the cable surface, and reduce the out-gassing of toxic smoke that may contain highly corrosive compounds. When exposed to fire or high heat, the coating intumesces (puffs up), and forms a thick, dense, firm foam layer, shielding the cable, reducing the penetration of heat through its thermal insulating properties, thereby minimizing decomposition of the cable jacket. Fire tested in accordance with IEEE-45, IEEE-383, and ASTM E-84 (UL-723, ULC CAN 4-S 102, NFPA-255, ANSI 2.5, and UBC 8-1).

## RECOMMENDED USES:

Fire protection of grouped electrical, control & communication cables, and their supporting trays.

## USED BY:

- Nuclear and fossil fuel power generating plants
- Utility companies
- Communication companies
- Ship builders
- Factories
- Steel mills
- Foundries
- Pulp and Paper mills
- Hospitals
- Hotels
- Aircraft and Aerospace industries
- Railroad and other transportation companies
- Oil and chemical installations
- Military installations and other installations where grouped cables are utilized.

## PERFORMANCE INFORMATION:

- \* Fire tested per IEEE 45 for shipboard use.
- \* Fire tested per IEEE 383 for power generating facilities.

- \* Class "A" rating per ASTM E-84 (UL-723, ULC CAN 4-S 102, NFPA 255, ANSI 2.5, and UBC 8-1).
- \* Smoke Classification: Very light to no smoke.
- \* Effect on Ampacity: Current reduction at temperature stability, less than 1 %.
- Cures at room or elevated temperature.
- Cures by water evaporation to form a tough, hard, flexible film.
- Will not leach (lose fire retardancy) on exposure to high humidity.
- Resistant to deterioration from temperature changes, flexing, impact and vibration.
- \* Approved for shipboard use by; American Bureau of Shipping, New York, NY
- Can be overcoated (topcoated) with Flame Control No. 40-40A Underwriter's Laboratories of Canada Class "A" Rated Latex Fire Resistant Coating.

\* Complete test reports and certifications available upon request.

## CHARACTERISTICS:

**Finish** . . . . . Flat, light textured finish

**Color** . . . . . Off-White or special colors made to order

**Spreading Rate** . . . . . 25.6 sq. ft./gal. (0.63 m<sup>2</sup>/L)  
 1/16" wet (62 mils) wet  
 approximately 3/64" (46 mils) dry  
 (1.59 mm wet, approx. .8 mm dry)

**Volume Solids** . . . . . 50% ± 2

**Weight Solids** . . . . . 62% ± 2

**Drying Time @ 77°F & 50% RH:**  
 To touch . . . . . 1 – 2 hours  
 To handle . . . . . 3 - 4 hours  
 To top coat . . . . . 16 hours  
 Full hardness . . . . . 48 hours

**Type of Cure** . . . . . Water evaporation

**Flash Point** . . . . . No flash to boiling (closed cup)

**Reducer/Cleaner** . . . . . Water

**Shelf Life** . . . . . 9 months (unopened)

**Packaging** . . . . . 1 & 5 gal. containers  
 weight/gal. 11 lbs.

**Shipping weight** . . . . . 4 gals - 48 lbs.  
 5 gals - 59 lbs.

**Application** . . . . . Spray or brush

## SURFACE PREPARATION:

All dirt, oil, grease, and other foreign matter must be removed. Mask off all surfaces not designated for coating.

## APPLICATION

Using a power mixer, thoroughly mix material. Should thinning be necessary, use ONLY water. Can be applied by spray or brush; however, spray application is recommended, as a more uniform coverage can be obtained. (READ "PRECAUTION" section before applying.) Apply to achieve a minimum wet film thickness of 1/16 inch [62 mils (1 .59 mm)]. This will give a dry film thickness of approximately 3/64 inch [46 mils (1 .19 mm)]. Care must be taken to ensure that all surfaces are properly coated. All overspray must be cleaned up immediately.

## APPLICATION EQUIPMENT:

### Hopper Gun

Gun & Hopper . . . Goldblatt or equivalent  
 Nozzle . . . . . 3/32 inch (2.4 mm)  
 Orifice Plate . . . . . 3/16 inch (4.8 mm)  
 Air Pressure . . . . . 20 to 25 psi  
 Reduction . . . . . Up to 10%

### Airless Spray

#### Titan 740 Impact (or Equivalent)

Pump  
 Fluid Pressure . . . . . 2800-3200 psi  
 Manifold Filter . . . . . None  
 Gun Filter . . . . . 30 Mesh or Remove  
 Fluid Hose . . . . . 1/4" diameter  
 Gun . . . . . LX-80 II  
 Tip . . . . . .023 - .029  
 Reduction . . . . . Up to 10%

## PRECAUTIONS:

Avoid breathing vapors or spray mist. Close container after use. Avoid contact with skin. Do not take internally. USE WITH ADEQUATE VENTILATION



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### CAUTION - CAUTION

This product contains water, and will conduct electricity until thoroughly dry. Extreme caution must be exercised when the material is being applied, and until the coating is thoroughly dry.

**Read MSDS before opening containers.**

**KEEP OUT OF REACH OF CHILDREN**

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### APPROVED by and COMPLIES With the following flammability standards

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American Bureau of Shipping  
New York, NY, U.S.A. . . . . Certificate No. ER738508

China Corporation  
Register of Shipping  
Taipei, Taiwan, R.O.C. . . . . Certificate No. 328-06-5

American Standard  
Testing Method E-84 . . . . . Rated Class "A"  
(UL-723, ULC CAN 4-S 102, (Flame Spread Rating 8.3)  
NFPA-255, ANSI 2.5, and UBC 8-1)

IEEE-45 . . . . . Recommended practice for electric  
installations on shipboard

IEEE-383 . . . . . Standard for type test of Class IE  
Electric cables, field splices and  
connections for nuclear power  
generation stations

As we cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used, we accept no responsibility for results obtained by the application of this information or the safety or suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. We sell the products without warranty or guarantee, and buyers and users assume all responsibility and liability for loss or damage from the handling and use of our products, whether used alone or in combination with other products.