



75 Chambers Drive, Unit 9, Ajax, Ontario, L1Z 1E1 (905) 619-0115

# FLAME CONTROL NO. 77

(Fire Retardant Mastic)

For Cable Fire Protection  
(Grouped Electrical, Control & Communication  
Cables and their supporting trays)

## DESCRIPTION:

Flame Control No. 77 Mastic is a low cost, water base, fire retardant coating, compounded from proprietary fire retardant resins, chemicals, and non-asbestos reinforcing fibers. It has been designed for use on grouped electrical cables and their supporting trays. No. 77 prevents the propagation of fire along the cable surfaces, and greatly increases the fire endurance time of supporting trays through its ablative and synergistic flame suppressing action. No. 77 contains no flammable solvents, and therefore, presents no fire hazard while being applied. However, extreme care must be exercised when applying No. 77, as it is a conductor of electricity while wet. (READ "PRECAUTIONS" section before applying.) 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 USC 42-1).

## 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:

- Cures at room temperature.
- Dries by water evaporation.
- Forms a hard, tough, water resistant film.
- Will not dust or flake, resistant to deterioration from temperature change.

- \* Meets IEEE-45 flammability requirements for shipboard use.
- \* Meets IEEE-383 flammability requirements for power generating facilities.
- \* ASTM E-84 flame spread rating Class "A".
- \* Smoke development factor: light to no smoke.
- \* Ampacity: Current reduction at temperature stability, less than 1%.
- Will not lose fire retardant properties on exposure to high humidity.
- Can be overcoated (topcoated) with Flame Control No. 40-40A Underwriters' Laboratories of Canada Class "A" Rated Latex Fire Resistant Coating.
- \* Approved for shipboard use by: American Bureau of Shipping, New York, NY  
China Corp. Register of Shipping, Taipei, Taiwan, R.O.C.

\* 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** . . . . . 20.5 sq. ft./gal. (0.5 m<sup>2</sup>/L)  
5/64" wet (78 mils) wet  
approximately 3/64" (40 mils) dry  
(1.98 mm wet, approx. 1.17 mm dry)

**Volume Solids** . . . . . 52% ± 2

**Weight Solids** . . . . . 68% ± 2

**Drying Time @ 77°F & 50% RH:**  
To touch . . . . . 1 - 2 hours  
To handle . . . . . 3 - 4 hours  
To top coat . . . . . 24 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. 12.5 lbs.

**Shipping weight** . . . . . 4 gals - 53 lbs.  
5 gals - 66 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 5/64 inch [78 mils (1.98 mm)]. This will give a dry film thickness of approximately 3/64 inch [40 mils (1.17 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%



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## PRECAUTIONS:

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

### 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**

## APPROVED by and COMPLIES With the following flammability standards

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 9.6)  
NFPA-255, ANSI 2.5, and UBC 42-1)

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.