



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 m²/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
Tip023 - .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

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