



## Product Technical Data Sheet

### FIRESTOP® AK - 312 FIRE RETARDANT CABLE COATING COMPOUND

#### PRODUCT DESCRIPTION:

**Firestop® - AK - 312 Cable Coating Compound** is a water based, ready to use, non-toxic heavy-duty Fire-Retardant Cable Coating Compound. This product is ablative and is designed to prevent vertical or horizontal propagation of fire along grouped or single communication or Power cables. Firestop®- AK - 312 Cable Coating has been specifically designed for use in Industrial and Utility applications. Firestop® - AK - 312 Cable Coating is suitable for interior or exterior applications and is both UV and weather resistant.

**Firestop® - AK - 312 Cable Coating Compound** is halogen free and does not contain solvents, plasticizers, asbestos or other hazardous inorganic fibres. Firestop®- AK - 312 Cable Coating Compound has low odour, is compatible with and adheres to typical cable jacketing materials. Our formulation has been used by major utilities and corporations for over 15 years and is considered by all of them for regular applications for fire break in cable runs.

#### APPLICATION DATA:

**Firestop® - AK - 312 Cable Coating Compound** can be used on both interior and exterior applications for both vertical and horizontal cable runs. The Cable Coating Compound can be used on both single and grouped electrical or communication cables. The Cable Coating Compound can be used on cables within cable trays or those outside of cable trays. Firestop®- AK - 312 Cable Coating Compound is typically applied as a continuous coating or if specified, at intervals of 10 to 20 feet (3 to 6 m) to serve as 'firebreaks' within the cable run, for example: 2 m coated lengths for horizontal trays or 2.5m coated lengths for vertical trays. (or as specified by the project).

**Firestop® - AK - 312 Cable Coating Compound** is conductive until dry. Do not apply to energized electrical conductors. Always apply under the supervision of project electrician or project safety manager, or after clearance provided by concerned Electrical Engineer for the application of the coating, the entire cable run must be inspected by qualified electrical personnel in order to identify areas of the cables where there is cracked or damaged insulation jacketing. These damaged areas must be appropriately repaired and approved before the application of the coating in order to maintain the integrity of the cables' insulation jacket.

**Firestop® - AK - 312 Cable Coating Compound** is supplied in 20 kg. / 25 kg. / 35 kg. PVC Pails. It is specifically designed for application by brush or airless sprayer. The Cable Coating compound should be at room temperature for best application. Surface and air temperatures should be between (5°C to 40°C) for storage and application. All surfaces which are not intended to be coated can be protected or cleaned after application. Surfaces to be coated must be clean, dry and free of any loose dirt, oil or any other contaminants. DO NOT ADD WATER or any thinning component.

Apply **Firestop® - AK - 312 Cable Coating Compound** in thin layers. If applying more than one coat, allow 6 to 8 hours drying time between coats. Required thickness should be accomplished with a single application, however, to ensure complete coverage, apply 2 or more coats. Under normal drying conditions, The Cable Coating Compound dries to the touch in 4 hours and should be completely dry in about 48 hours. Actual drying time will vary according to thickness and environmental conditions. Allow product to dry a minimum of 72 hours before exposure to rain or to other forms of moisture. Apply coating to the specified thickness in order to obtain the desired rating. For single cables, coat entire surface of the cable. For grouped cables, coat all exposed surfaces of the cables. If cables are within a tray, the tray may also receive the coating in order to ensure ALL exposed surfaces of the cables are coated.

*For more details related to storage, handling, application and other pre & post application procedures kindly contact to our marketing / execution team or refer to the Field Quality Assurance plan.*

## TECHNICAL INFORMATION:

Nature of Product	Thixotropic Water based Mastic Compound, comprised of Thermo-Acrylic Resins
Solids Content	70 - 75 %
Color	White / Off White
Packing	20 kg. / 25 kg / 35 kg. Air Tight Sealed PVC Pails
Bulk Density	1400 kg. / m <sup>3</sup> ± 10% (Minimum)
Consumption	2.0 kg. ± 10% Per SQM. for 1.60 mm DFT (excluding wastage / over application)
Resistance to Mineral Oil	Excellent - No effect against Mineral Oil
Limiting Oxygen Index	≥ 65%
Flash Point	Nil
Shelf Life	2 Yrs. (Seal Pack) from manufacturing (under prescribed storage conditions)
Recommended Coating	1.60 mm DFT
pH Factor	7 to 10
Storage	In a cool dry place temp. between – 5 to 40° centigrade, under shade / go-down
Drying Time	Air Dried, Touch Dry - 2 – 6 hrs, hard dry 8 - 24 hrs depending on weather conditions
Retrofitting	New Cables can be placed along with coated cables, keeping in mind that coated cables must not be damaged, after retrofitting new cables & old damaged coatings (if any) must be applied with Cable Coating Compound.
Thinner	No thinning required, however if required water can be added for thinning purpose.

#### Other Important features:

- 100% Moisture, Water & Weather Proof
- Solvent free
- UV Resistant
- Non-Toxic, Contains no toxic metals
- No Hazardous ingredients involved
- Asbestos Free
- Odorless
- Halogen Free
- No Cable Derating (No ampacity reduction)
- Passes VOC Test as per LEED version 4.1
- High Life Expectancy i.e.  $\geq 40$  years (post application)

#### TYPE TEST DETAILS:

- APPROVED as per **FM – 3971** by **FM APPROVALS USA** - Fire Protective Coatings for Grouped Cables
- Radiation Test for – **100 MEGA RADS OF GAMMA RADIATION** followed by Fire Test as per IEEE:383 (1974).
- Tested as per **IEC: 60332-3-23 Cat. B Flammability Test 40 mins – temp. above 1500°C** for grouped cables.
- Tested as per **IEC: 60332-3-21 Cat. A F/R & EN: 50266-2-1** Flammability Test for 40 mins for grouped cables.
- Tested as per **IEEE: 383 (1974) & IS: 10810 (53)** for Flame propagation & Flammability Test
- Tested as per **ASTM D 2863-2013** for Limited Oxygen Index Test
- Tested as per **ASTM D 2843** for Smoke Density Rating Test
- Tested for **Toxicity - ROHS Test as per European Directive 2011/65/EU Annex II (RoHS)**
- Tested as per **NES: 713 & NCD: 1409** Toxicity Index Test
- Tested as per **IEC: 60754-2** Halogen Acid Gas Test
- Tested as per **IS: 7098 (P-1) 1988** Ampacity & Die-Electric Strength
- Tested as per **ASTM B117-2016** Salt Spray Test.
- Tested as per **ASTM D 2336 & SCAQMD 1113 & CDPH v1.2** VOC Test
- Tested for **Water Immersion Test – 360 Hours** (15 days)