



# DC310 Fireproof Cable Coating

## Description

DC310 fireproof cable coating for wires and cable is developed using innovative intumescent technology. It is a heavy duty intumescent coating for interior applications used to effectively prevent flame spread. When fire occurs, the coating will rapidly intumesce to form a foam char layer that prevents fire propagation. DC310 fireproof cable coating is water based, asbestos-free, non-halogenated and environmentally-friendly. DC310 is able to protect cables for up to 90 minutes depending on application thickness and cable type.

## Specifications

<b>Color :</b>	<b>White</b>
<b>Finish :</b>	<b>Flat</b>
<b>Density:</b>	<b>1.3±0.1 kg/L</b>
<b>Viscosity:</b>	<b>10000-25000cps(25°C); Adjustable</b>
<b>pH:</b>	<b>7.5±0.5</b>
<b>VOC:</b>	<b>56 g/L</b>
<b>Typical thickness:</b>	<b>1mm WFT equivalent to 0.6mm DFT</b>
<b>Solid content:</b>	<b>≥60% Volume</b>
<b>Storage temp:</b>	<b>40° F - 95° F (5° C - 35° C)</b>
<b>Drying time (25° C) :</b>	<b>3-4 hours touch dry, 24 hours dried through</b>
<b>Application Temp:</b>	<b>40° F - 104° F (5° C - 40° C)</b>
<b>In-Service Temp:</b>	<b>-13° F - 176° F (-25° C - 80° C)</b>
<b>Packaging:</b>	<b>25 kg/pail</b>
<b>Shelf life:</b>	<b>12 months</b>

## Advantages

- Intumescent
- Water Based
- Low Odor
- Asbestos Free
- Flexible
- Safe and Easy to Use



## Testing

**IEEE383- Standard for Qualifying Electric Cables and Splices for Nuclear Facilities**

**IEC60332-3A- Test of vertical flame spread on single or grouped electrical cables**

**GB28374- Standard flame spread test of electrical cables.**

**ASTM D5116 - Determination of Organic Emissions from Indoor Materials/Products**

**ASTM E662- Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials**

# DC310 Fireproof Cable Coating

## Recommended sprayer:

Pump:	Wagner PS 3.34
PSI:	3300
GPM:	1.00
Tip:	517 – 523 or equivalent.
Filter:	60 mesh at machine
Hose:	3/8" diameter airless spray line for the first 100' from pump and 1/4" x 3' whip
Pump:	(Graco) TexSpray Mark 5 or equivalent
PSI:	3300
GPM:	1.35
Tip:	517 - 523 or equivalent.
Filter:	60 mesh at machine, removal of filter is recommend from gun
Hose:	3/8" diameter airless spray line for the first 100' from pump and 1/4" x 3' whip



## Installation guide:

1. Surfaces to be coated must be clean and dry. Use a dry rag to remove any oil, grease, and dirt prior to cable coating application.
2. Mix DC310 cable coating thoroughly by a power agitator before application. Thinner is normally not required. If necessary, use potable water (3% max.) to adjust viscosity. Water is also used for tools and spray machine cleaning.
3. Coating can be applied by means of airless spray equipment in a single pass, not more than 1mm-1.2mm (wet coating thickness) to prevent slumping. Surface shall be measured using a wet film thickness gauge. If applying coating by brush or roller, it may be required to apply thinner coats to prevent slumping. The coating should be applied when site temperature is between 5° C (40° F) and 40° C (104° F). Temperature must be maintained until coating has fully dried.
4. Verify the DFT by using calipers to measure the cable before coating and once coating has fully dried.
5. Do not allow the coating material to remain in hoses, gun or spray equipment. Clean all equipment with water immediately after use.
6. All unused coating should be stored in tightly closed container. Surface skinning may show in a partially filled container. Filter the material prior to use.

The estimated quantity of DC310 can be calculated as =  $2 \times \pi \times R \times \text{Length of cable} \times \text{Number of cables} \times \text{Thickness of coating}$ . All coating approved by FM3971 must be applied at 1.6mm DFT.