

## SafeCoat® MTI PFP2

### DESCRIPTION

SafeCoat® MTI PFP2 is a single-component latex, intumescent fire retardant coating with enhanced weathering properties. This product is used for the top side of carbon steel panels underneath rail car flooring to provide fire protection and increased evacuation time in the event of a fire.

### FEATURES

- **Fire-resistant:** will not burn in liquid or solid state.
- **Easy to use:** may be spray, brush, or roller-applied.
- **Intumescent:** In the event of a fire the coating will swell and form a protective insulating char to protect the substrate.

### PROPERTIES

<b>Coating Type</b>	Latex
<b>Finish</b>	Flat finish
<b>Color</b>	Tan
<b>Specific Gravity</b>	11.71 lbs/US Gallon or 1.403 g/mL
<b>Solids by Weight</b>	67.2%
<b>Solids by Volume</b>	55.2%
<b>VOC</b>	10.5 g/L
<b>Dry Time</b>	<b>Touch:</b> 260 minutes* <b>Recoat:</b> 300 minutes* <b>Full cure:</b> 7 days*
<b>Film Thickness</b>	<b>Wet:</b> 35 mils (45 sq. ft./gallon) <b>Dry:</b> 19 mils
<b>Perm</b>	5 perms
<b>Flash Point</b>	No Flash
<b>Storage Limits</b>	Keep from freezing or high temp. (>50° F/10°C - 86° F/30°C required)
<b>Shelf Life</b>	6 months
<b>Packaging</b>	Available in five-gallon pails

\* 25 mil WFT, 40% RH, 21°C; dry times will vary based on thickness, temperature, and humidity



Above: Steel test sample before (left) and after (right) fire test (ASTM E119) showing the thick char that formed and protected the underlying steel

### APPLICATION REQUIREMENTS

#### Mixing

- Thoroughly mix prior to use
- Mechanical/shear mixing is required for best product viscosity and consistency
- Use standard shielded drywall mixing paddle, Jiffy style mixer, or ½" electric drill with a slotted paddle mixer

#### Spray Equipment

- Airless pump operating with a minimum fluid pressure of 3,000 psi and 4.7 L/m (1.25 gpm)
- Must have reliable and consistent pumping
- A direct immersion pump is required (pumps utilizing siphon hoses at the material intake not recommended)
- Graco UltraMax 795 or equivalent recommended
- High pressure hoses, minimum 10 mm (3/8") hose rated to exceed the maximum pump capacity
- Maximum hose length of 150' must not be exceeded
- Optional 6.35mm (1/4") whip hose is acceptable at a maximum of 61cm (2') length
- Graco XHD Spray Gun or equivalent; filters removed
- High pressure reversible tip 0.035" or greater

#### Equipment Setup

- Pumps and Lines: must be clean and uncontaminated
- Prior to start-up: all pressure is removed from lines
- Filters: all filters are removed from guns and pumps

#### Environment

- Minimum ambient temperature of 50° F/10°C and rising; maintained during and 48 hours after application
- Maximum relative humidity of 85%; high humidity will increase drying times and may promote sagging
- Steel temperature 4° F/2°C above the dew point
- **SafeCoat® MTI PFP2** must be protected from weather exposure and freeze-thaw until full cure

#### SafeCoat® MTI PFP2 Application

- Steel must be free of rust and primed prior to coating
- Can be applied using a high quality brush or roller
- For spray application, adjust to lowest pressure required to achieve the desired fan pattern
- Maximum film build per coat: 30-35 mil WFT

#### Clean Up

All application equipment can be cleaned with water to flush and remove liquid product. If product has dried, use solvent to remove it.

**Storage:** Keep product from freezing (store above 50° F/10°C to maximum 85° F/30°C required as > 50° F/10°C - <86° F/30°C required as >30°C greatly reduces product shelf life.