Technical Data Sheet (04/13/09)

DESCRIPTION

OMEGA FIRE is a one-component coating having a blend of eight different ceramics combined in a water-based formula to create a barrier against extreme flame impingement and heat migration. The coating can withstand direct flame up to 2000°F. by hardening on the surface at first contact, while continuing to provide the necessary insulation value. The resin blend binds the compounds together and forms a char to matrix the ceramics across the face of the coating, facing the flame.

OMEGA FIRE is designed to stay intact with constant adhesion at extreme temperatures. It is applied over HPC® Coating to create a system to use over structural steel.

TYPICAL USES

- As fire protection for:
- strategic locations on warfare ships
- engine rooms and galleys on commercial ships
- > corner beams, elevator shafts, and stairwells
- walls, ceilings, and boiler rooms
- To control and contain fires in high-rise buildings; prevent the spread and collapse of support structures.
- > To control the spread of fire on ships and tankers with minimal damage to the hull or support structure.
- Additional tests continuing (I beam)

TESTS AND CERTIFICATIONS

- USDA Approved
- 2) Marine Approvals for Salt Water/Maritime Use:
 - US Coast Guard
 - ABS (American Bureau of Shipping)
 - > IMO (International Marine Organization)
- 3) Fire Endurance Testing (UL1709/ASTM E119)
- Flame Spread/Smoke (ASTM E84) Class A Fire Rated

APPLICATION METHODS

OMEGA FIRE can be applied to metal, concrete, masonry, and composite surfaces. The application can be by spray or by trowel.

For specific instructions on surface preparation, mixing and application, please refer to the SPI Application Instruction sheet for HSC® Coating.

NOTE: A prescribed thickness is required for specific temperature and duration of protection.

MINIMUM SPREAD RATES (mil thickness)

24.0 sq. ft/gal = 50 mils dry film thickness 12.0 sq. ft/gal = 100 mils dry film thickness 6.0 sq. ft/gal = 200 mils dry film thickness 4.8 sq. ft/gal = 250 mils dry film thickness 2.6 sq. ft/gal = 500 mils dry film thickness

PHYSICAL DATA

- Solids: By weight: 61% By volume: 74%
- Dry Time: 4-6 hours to tack free. Overcoat and cure window is according to humidity and temperature.
- ♦ Lead and Chromate Free
- Cures by evaporation (water-based)
- ♦ Weight: 9.5 lbs per gallon
- Vehicle Type: Water-based resin system of acrylic and silicone
- Shelf Life: Up to 3 years unopened under appropriate storage conditions (See MSDS)
- ♦ VOC Level: 76 grams/liter
- Viscosity: 90,000 centipoise
- ♦ UV resistant
- Mold and mildew resistant

SAFETY PRECAUTIONS

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas. For more specific safety procedures, please refer to the OMEGA FIRE Material Safety Data Sheet. **KEEP OUT OF REACH OF CHILDREN.**

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