

MPCI Product Data Sheet
Revision Date: September 2005

Thermablock™FP

Fire Protection Coating

PRODUCT DESCRIPTION

Thermablock™FP is one pack, single use, fire protection coating for composites, steel, aluminum, concrete and other substrates requiring fire protection. Although most easily applied by trowel, it can be reduced for conventional or HVLP spray application, if desired. Upon exposure to fire, Thermablock™FP is easily removed for inspection and repair of substrate before reapplication of the coating.

USES

- Commercial Building fire protection.
- Automobile under hood heat protection.
- Hot vessel and pipe insulation.

SUBSTRATES AND SURFACE PREPARATION

General

Surfaces should be blasted to a 2.5-3 mils profile or well abraded with 60 grit sandpaper. Surfaces must clean and dry. Employ adequate methods to remove dirt, dust, oil and other contaminants that could interfere with adhesion of Thermablock™FP. In corrosive environments, surfaces must be suitably primed and deglossed (sanded) prior to application of Thermablock™FP. Customer should evaluate adhesion of the coating to assure compatibility with prepared surface.

Application

Mix each can to uniformity with a spatula or paint stick prior to use. Thermablock™FP is typically troweled on at approximately ¼ inch per coat with 2-3 days dry time between coats. Before recoat, prior coat should be roughened with 80 grit sandpaper and dust removed via compressed air. Total required coating thickness depends on the substrate and degree of protection required, as determined by the customer. For most substrates, two coats or approximately ½ inch of fully cured Thermablock™FP will adequately protect against a UL 1709 (2000°F) fire for 30 minutes. Thermablock™FP can be topcoated with Thermablock™AR for abrasion resistant and/or finished with any esthetic topcoat.

For conventional or HVLP spray application, reduce to a suitable viscosity with isopropyl alcohol or denatured ethanol. Use a 0.055" or larger gun tip. Continuous pot agitation is required. Apply no more than 80 mils per coat with 1-2 days dry time between coats. Thermablock™FP sprays with a rough texture and if uncontaminated, sanding isn't required between coats. As with trowel application, total required coating thickness depends on the substrate and degree of protection required, as determined by the customer. Do not apply by airless or air assisted airless, as these methods may destroy the insulative fire protection properties of Thermablock™FP.

For spot repair if dented or gouged, remove damaged material and follow trowel procedure above.

CURING SCHEDULE

Product cures by reaction with ambient humidity above 50°F and slowly releases safe levels of isopropyl alcohol during cure. Depending on conditions, full cure and fire protection properties are achieved over a period of weeks to months. Product can be topcoated before fully cured.

CLEANUP AND SAFETY

Cleanup

Use isopropyl alcohol or denatured ethanol. In case of spillage, absorb and dispose per local regulations.

Safety

Follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Wear appropriate Personnel Protective Equipment.

Caution

Flammable materials – keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shipping Weight: 1 Gallon Kit – 7 lbs

5 Gallon Kit – 35 lbs

Storage Temperature & Humidity: Store indoors at 32°F to 100°F, at ambient Relative Humidity

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F	50°F	50°F	20%
Maximum	100°F	100°F	100°F	95%

Technical Data

Characteristics	Thermablock™FP
Maximum Sustained Temperature	2000°F, one use only
Density	6.2 lbs/gallon, (740 g/liter)
VOC	3.56 lbs/gallon, (426 g/liter)
Weight per Gallon	6.2 lbs/gallon
Shelf Life	6 months @ 75°F, unopened
Thinner	isopropyl alcohol or denatured ethanol

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