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INNOVA-FR 115 SE®

General Application Guidelines

General Description of Product

Innova-FR 115SE® is a unique 100% solids, two component FR epoxy based intumescent coating, based on proprietary non-halogenated phosphate technology and offering excellent mechanical properties. Upon exposure to a fire condition, the product foams ten fold to provide an effective char insulation and protect the metal substrate (mostly steelwork) from losing its load bearing capacity.

Surface Preparation & Mixing Procedure

The substrate surface should be clean, dry, and free of dirt, oil, loose scale or other foreign matter in accordance with **SSPC SP2 AND SP3** procedures. A primer treatment is usually not required for use on most metals due in large part to the flame retardant's unique strong adhesion to polar composite surfaces. However, abrasive sand blasting is recommended to ensure a uniform, contaminant and corrosion free surface prior to the application of the coating.

Since the **Innova-FR 115SE®** is a relatively viscous material, thorough mixing of the components (10 minutes minimum) is required from the bottom to the top of the container just prior to application. The mix ratio is 100 parts of component A (epoxy flame retardant mixture) to 7 parts of component B (curing agent). Add component B slowly and gradually mix into component A to avoid spattering because of the viscosity differences of the two materials. Mix only the quantity of product required in consideration of the working life of the material. Continual mixing is not required, but caution should be taken to avoid aerating the material.

Application Procedures

Do not apply when the air temperature or the temperature of the surface being coated is below 50°F (10°C) and when the relative humidity is above 85% or during times when precipitation is expected within 24 hours for an exterior application. Surface temperature should also be a minimum of 3°C (5°F) above the dew point. A distinct advantage to using the **Innova-FR 115SE®** is the product's ability to "set up" and not run or drip which is typical of other FR epoxy materials. Thus, the applicator can trowel or spray the material to ceiling and vertical positioned substrates.

For spray equipment, use a modified single component, high pressure conventional airless sprayer with a reversible tip and for application pressures in the 5000 to 7000 PSI range. The hose is usually 3/8 to 1/2 inch in diameter and no longer than 30 feet. The spray gun should be held 20 to 24 inches

from the surface to be coated. The wet film thickness should be checked frequently with a film thickness gauge. A practice surface should first be used to gain familiarity with the material and equipment. Due to the high build nature of this material, it may also be necessary to roller areas requiring a smooth cosmetic finish. The trowel method can accomplish the same results and is recommended for smaller application areas.

Application Guidelines and Specifications

Coverage or spreading rates are somewhat variable and depend on the surface and type of substrate as well as the fire rating desired. Also, the entire surface should be thoroughly coated to a thickness equal to or greater than the minimum required and to allow for a very minor shrinkage when product is fully cured. However, as a general rule of thumb, we offer and suggest the following guidelines and assuming a smooth steel substrate surface:

Film thickness (mm)	Film thickness (in.)	Coverage (sq ft/gal)	Rating
2	0.08	27.1	Non load bearing structure
3.5	0.14	15.5	Non load bearing structure
9.4	0.375	5.8	ASTM E119 (1 hr, 54 min)
12.5	0.5	4.3	ASTM E119 (2 hr, 20 min)

Working of this material is 2 hours at 25°C (77°F). If applying at a cooler temperature, i.e., 15°C (59°F), one can allow for an extended pot life of 20 minutes; if applying at a warmer temperature, i.e., 35°C (95°F), the pot life will be shortened by 20 minutes. Full cure occurs within 24 to 48 hours. In common with all epoxy based coatings, a slight yellowing may occur over time upon exterior exposure. This phenomenon is not detrimental at all to fire proofing performance. Where a durable cosmetic finish with good gloss and color retention is required though, one should overcoat with a suitable, outdoor weathering topcoat.

Aftercare Maintenance

Clean all equipment and flush lines immediately after use with a suitable solvent.

First Aid and Environmental Measures

Use with adequate ventilation. Do not breathe in vapors or spray mist. Wear an appropriate and properly fitted respirator (NIOSH/MSHA) during and after application unless air monitoring demonstrates that vapor and mist levels are below applicable limits. Avoid contact with eyes, skin, and clothing, and wash thoroughly after handling.

In case of eye contact, flush immediately with plenty of water for at least 15 minutes and seek medical attention immediately. In the event of skin contact, wash thoroughly with soap and water. If affected by inhalation of vapor or spray mist, remove yourself to fresh air. Do not take internally. If swallowed, get medical attention immediately. Avoid vomiting.

Store inventory in a dry, cool storage area. In case of spillage, isolate the product while containing the spill away from effluent runoff. Dispose of contaminated material in accordance with federal, state, and local environmental regulations.

Technical, MSDS, & Packaging Information

Innova-FR 115SE® is a “green” proprietary flame retardant coating that doesn’t require the co-use of a synergist and a blowing agent, typical of conventional intumescent coatings. So without these secondary additives, the FR system inherently improves the retention of physical properties, such as tear strength, impact resistance, and corrosion resistance.

% Solids:	100% (VOCs – none)
Mix Viscosity @ 25°C:	88,000 cps
Color:	Matt textured, medium gray finish
Weight:	10.2 pounds per gallon for each component
Packaging:	5 gallon epoxy lined steel pails – gross weight 54 pounds, net weight 51 pounds (23.13 KGS). (4.5 gals. of component A, 0.5 gal. of component B)

HMIS Rating:	Component A Health – 1	Flammability – 0	Reactivity – 0
	Component B Health – 2	Flammability – 1	Reactivity – 1

Post 9/11 evaluations of fireproofing materials lead to the conclusion that adhesion, weathering, and impact resistance are key to the selection of a superior FR coating as in the Innova-FR 115SE®

Note: Innova-FR is registered trade mark of Selective Technologies, Inc. MJL Industrial, Inc. is the International Marketing Representative for Innova-FR.

The above technical information is correct to the best of our knowledge. It is provided as guidance for use and not to be considered as a warranty or quality specification. This information relates only to the specific material designated and may not be valid for such material used in combination with any other specific materials or in any other process not mentioned above.