

MJL Industrial, Inc.

405 Uxbridge Way

Hockessin, DE 19707, USA

Tel: +1 (302) 234-0898; Fax: +1 (302) 234-4167

www.mjlindustrial.com

E-mail: mjlindustrial@aol.com and webmaster@mjlindustrial.com

INNOVA-FR 115SE®

(HIGH PERFORMANCE EPOXY FIRE PROTECTIVE COATING)

INNOVA-FR 115SE® is a unique two-component epoxy flame retardant – intumescent coating based on proprietary and patented, non-halogenated phosphate technology. When exposed to a fire condition, **INNOVA-FR 115SE®** expands to form a robust, dense char insulation layer, encapsulating the substrate from the effects of rapid flame spread and smoke evolution. The flame retardant active ingredients within **INNOVA-FR®** products are not water soluble and will not leach out over time.

INNOVA-FR 115SE® - FEATURES & ADVANTAGES

- Strong adhesion to steel surfaces without the use of primer coatings
- 2+ hour fire rating with ½” coating on ¼” untreated and unprimed carbon steel
- Excellent impact resistance, leaving only highly ductile breaks
- Water and chemical resistant, applicable for exterior use without top coat
- Excellent tear strength with peel values in excess of 2300 psi
- One pass application with thick build up and no sag or drip on vertical surfaces
- Low smoke evolution and non-toxic as per British Standards 7329 protocol
- Easy to mix and apply by trowel or high pressure airless spray gun

SPECIFICATIONS:

% Solids	100
Mix Ratio (A : B)	100 : 7
Mix Viscosity @ 25°C	88,000 cps
Working life @ 25°C	2 hours
Tack free set time @ 25°C	4 hours
Full cure @ 25° C	72 hours

PERFORMANCE DATA

ASTM E119 Fire Rating

90 minutes @ 3/8" thickness applied in one coat on unprepared steel (total time – 1 hr, 54 min)

2 hours @ 1/2" thickness applied as one coat to untreated/unprimed steel (total time – 2 hr, 20 min)

ASTM E662 Smoke Chamber Test

Ds @ 1.5 min.	0.5 (non-flaming)	1.7 (flaming)
Ds @ 4.0 min.	1.1 (non-flaming)	51.7 (flaming)

ASTM E162 Radiant Panel Flame Spread Test: Class A

ASTM D256 Izod Impact Testing: 0.93 foot-pounds/square inch impact strength

ASTM 2240 Shore D Hardness: 70

ASTM G53 1000 Hr UV Exposure: No visual cracking, spotting, or melting

ASTM B117 720 Hrs Salt Spray: No loss of coating adhesion; no defects

BSS 7239 Toxic Gas Testing @ 72.2°F, 52% relative humidity, 30.07 inches of mercury

CO:	325 ppm	Nitrogen oxide:	57.5 ppm	HCN:	20.0 ppm
Nitrogen dioxide:	8.0 ppm	HCl:	27.5 ppm	Sulfur dioxide:	10.0 ppm

Complimentary Application Information

Low speed mixing should be applied to Component A (resin mix) for several minutes to ensure uniform distribution of its ingredients. This action will decrease the resin mixture viscosity and will allow for easier addition of the much lighter Component B curing agent. Care should be taken to allow for a minimum of 7 parts of the B component to ensure complete curing of the resin mix (100 parts) and thorough mixing will ensure uniformity. Pot life of the mixture is two hours. The substrate surface should be prepared in accordance with SSPC SP2 or SSPC SP3 procedures. Care should be taken to ensure the removal of any and all contaminants such as loose scale, primers, solvents, oils, or grease that may interfere with the adhesion of the flame retardant coating. INNOVA-FR 115SE® however is extremely tolerant of compromised surfaces and will provide excellent protection over tight adhering rust or most existing coatings in sound condition.

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 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.

Revised: September 1, 2008