

CODE: FR-1500

PRODUCT NAME:

Epoxy Intumescent Coating

DESCRIPTION:

FR-1500 is a spray or trowel applied, epoxy based intumescent compound which, when subjected to fire, expands to form an insulating barrier. It is suitable for protection of offshore steel or concrete structures, storage vessels and supports, and pipeworks, from cellulosic and hydrocarbon fires.

TECHNICAL DATA:

Binder	Epoxy resin
Pigment	Suitable
Finish	Flat
Shade	White, grey, red, brown,
Specific gravity after mixing	1.4 ± 0.1 Kg/Lit
Volume solid	80 ± 3 %
Flash point	80 °C
Typical dry film thickness	1000-6000 Microns Depends on protection required
Mixing ratio by weight	Base : 100 parts Hardener : 25 parts
Substrate	Primed steel
Application method	Airless spray , brush, roller, Trowel
Thinner / Cleaner	T-200
Induction Time at <20 °c	Not applicable
Theoretical spreading rate - one coat (at 1000 microns)	0.8 M ² /Lit
Packing	Base : 20 kg Hardener : 5 kg
Shelf life	12 Months

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Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	3 hours	20 hours	16 hours	Not limited	12 days
25°C	2 hours	16 hours	12 hours	Not limited	7 days
40°C	1 hours	12 hours	10 hours	Not limited	4 days

Note: Drying times are dependent on applied film thickness; all data in this catalogue are reported at recommended DFT.

Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	120 hours	90 min	60 min

SURFACE PREPARATION

All Surfaces to be coated should be clean, dry and free from contamination. Prior to Paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

Primed Surfaces

FR-1500 should always be applied over a recommended anti-corrosive coating scheme.

The primer surface should be dry and free from all contamination, and FR-1500 must be applied within the overcoating intervals specified.

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. sa2½ (ISO 8501 -1:1988) or SSPC-SP10, Abrasive, or SSPC-SP11, power too cleaning) and patch primed prior to the application of FR-1500.

Concrete, precast blockwork etc

FR-1500 is suitable for application to concrete. For the first coat it is recommended that Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6%. All surfaces should be clean, dry and free from curing compounds, release agents, trowelling compounds, surface hardener, efflorescence, greasa, oil, dirt, old coatings and loose or disintegrating concrete. All poured and precast concrete must also be sweep blasted (preferred) or acid etched to remove laitance.

Surface preparation shall not take place in the following conditions:

- At temperature below 5 °C.
- When the relative humidity greater than 85%.
- When the metal surface temperature is less than 3 °C above the dew point.
- Outside day light hours on exterior locations.

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Application Method

Material is supplied in two containers as a unit. Always mix a complete unit in the proportion supplied. Once the unit has been mixed it must be used within the working Pot life specified.

1-Agitate part A with a power agitator.

2-Combined entire contents of curing agent (part B) With Base (Part A) and mix thoroughly with power agitator.

(Stir during application to maintain uniformity of material.)

Application Equipments

Air less Spray	Cloverdale pneumatics or other equipment approved by Pedram Paint Group.
Trowel	Only suitable for small area
Brush	Typically 500 mic can be achieved.
Roller	Typically 500 mic can be achieved.

Flush Equipment with recommended Cleaner before and after use.

ENVIRONMENTAL CONDITIONS:

- To prevent moisture condensation during application, surface temperature must be at least 3 °C above the dew point.
- Never apply coatings under reverse environmental condition.
- In hot climate, material temperature should be 20 to 25 °C prior to mixing; otherwise pot life becomes very short.
- For satisfactory cure, air and surface temperature must be above 10 °C
- Paint shall not be applied when wind speed is in excess of 7 m/s

Air temperature	10 to 40 °C
Surface temperature	10 to 50 °C
Material temperature	15 to 40 °C
Relative humidity	Max 80 %

HEALTH AND SAFETY

This product is Flammable. Keep away from heat and open flame .Keep container closed .Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.

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