

CODE :EP-251 -HB -1

PRODUCT NAME:

Two Component Modified High Build Epoxy Coating

DESCRIPTION :

EP-251-HB-1 is a two component high-build economical epoxy polyamide cured coating in industrial atmospheres with excellent mechanical properties and durability in both marine and industrial environments for maintenance works, metal surfaces and concrete.

This paint with suitable primer gives excellent adhesion and Anti Dust Coating film to long term protect against splash, spillage and fumes of acids, alkalis, water, salt solutions and other corrosive chemicals as well as weathering and abrasion on structural steel, concrete, masonry and Aluminum .This product is also recommended for Tanks and pipes with suitable Polyurethane top coat used on exterior surfaces.

TECHNICAL DATA:

Binder	Epoxy resin
Pigment	Chemical resistant pigment
Finish	Flat
Shade	RAL color
Specific gravity after mixing	1.4 ± 0.1 Kg/Lit
Volume solid	80 ± 3%
Flash point	31 °C
Typical dry film thickness (per one coat)	150-300 Microns
Number of coat	One or two
Mixing ratio by weight	Base : 100parts Hardener : 16 parts
Substrate	Primed steel or concrete
Application Method	Conventional or Airless Spray
Thinner / Cleaner	T-200 / T-C-200
Weight of added thinner	7-15 %
Induction Time at <20 °C	20-30 minutes
Temperature resistance	Min : -120 °c Max : 120 °c
Theoretical spreading rate - one coat (at 150 microns)	5.3 M ² /Lit
Packing	Base : 25 kg Hardener: 4 kg
Shelf life (cool and dry place)	Base : 12 Months Hardener : 12 Months

Drying Time

Temp	Touch dry	Hard dry	Over Coating		Full cure
			Min	Max	
10°C	9 hours	32 hours	30 hours	2 months	14 days
25°C	5 hours	26 hours	20 hours	45 days	7 days
40°C	3 hours	18 hours	8 hours	28 days	4 days

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

Pot life

Temp. of paint	10°C	25°C	40°C
Pot life	14 hours	5 hours	3 hours

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

EP-251-HB should always be applied over a recommended anti-corrosive coating scheme.

The primer surface should be dry and free from all contamination, and EP-251-HB-1 must be applied within the overcoating intervals specified.

Broken and damaged surfaces should be prepared to the specified standard (e.g.sa2 ½(ISO 8501 - 1:1988) or SSPC-SP10, Abrasive, or SSPC-SP11, power tool cleaning) and patch primed prior to the application of EP-251-HB-1.

Surface preparation shall not take place in the following conditions:

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

Application Method

This 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- Combine 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.)

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Application Equipments

Air less Spray	Tip range 0.018-0.021 inch spray tip not less than 200-250 Bar (2800-3500 p.s.i)	Total output pressure at
Air Spray	Nozzle orifice 1.8-2mm Nozzle pressure: 2-4 Bar (29-58psi)	
Brush	Typically 70-80 mic can be achieved.	
Roller	NOT RECOMMENDED	

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 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.
 - Paint shall not be applied when wind speed is in excess of 7 m/s
 - 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
- Relative Humidity shall not exceed than 80% during surface preparation and paint application.

Air temperature	10 to 40 °C
Surface temperature	10 to 50 °C
Material temperature	10 to 30 °C

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.