

CODE: EP-245-1 (surface concrete)

PRODUCT NAME:

Polyamide Cured Epoxy Intermediate Coating

DESCRIPTION:

EP-245-1 is a two component superior polyamide cured epoxy coating which forms durable coating systems with a wide range of topcoats for immersion and non-immersion services. It is suitable for a variety of substrates.

EP-245-1 is recommended for structural steel, machinery, pipes and tanks exterior in paper mills, oil refineries, power plants, chemical process and waste treatment plants.

Suitable topcoats are epoxies, coal tar epoxies, acrylics, alkyds and polyurethane coatings.

TECHNICAL DATA:

Binder	Epoxy resin
Pigment	Suitable pigments and extenders
Finish (ASTM D 523)	Flat
Shade	RAL Colors
Specific gravity after mixing (ASTM D 1475)	1.4 ± 0.1 Kg/Lit
Volume solid (ASTM D 2697)	70 ± 3 %
Flash point	28 °C
Typical dry film thickness (ASTM D 1186)	100-150 microns per one coat
Number of coat	One or two
Mixing ratio by weight	Base : 100 parts Hardener : 16 parts
Substrate	Cleaned concrete
Application method (FED.ST 141(method4331))	Conventional or airless spray , brush , roller
Thinner / Cleaner	T-200
Weight of added thinner	5-10 %
Induction Time at <25 °C	20-30 minutes
Theoretical spreading rate (at 100 microns) (ASTM D 344)	7 M ² /Lit
Packing	Base : 25 kg (EP-245-1) Hardener : 4 kg (EP-245-1H)
Shelf life*	Base :12 Months Hardener :12 Months

***Note:** It is dependent on storage temperature and reduces at storage temperature above 20° C. Do not store above 40 °C. Shelf life is exceeded if the liquid is gelled or if the mixed product forms gels before application.

Drying Time (ASTM D 1640)

Touch dry	Hard dry	Overcoating		Full cure
		Min	Max	
1- 3 hours	3-6 hours	8-12 hours	30 days	7 days

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

Above Specification Is Based On Mixture Of The Two Components.
($23 \pm 3 \text{ }^\circ\text{C}$ And , $30 \pm 5 \text{ \% RH.}$)

Pot life (ASTM D 1849)

Temp. of paint	$15 \pm 3 \text{ }^\circ\text{C}$	$23 \pm 3 \text{ }^\circ\text{C}$	$40 \pm 3 \text{ }^\circ\text{C}$
Pot life	9-12 hours	5-8 hours	2-3 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-245-1 should always be applied over a recommended anti-corrosive coating scheme.

The primer surface should be dry and free from all contamination, and EP-245-1 must be applied within the overcoating intervals specified.

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g.sa2 ½(ISO 8501 - 1:1988) or SSPC-SP10, Abrasive, or SSPS-SP11, power tool cleaning) and patch primed prior to the application of EP-245-1.

Under License C



Approved b



Concrete, precast block work etc

EP-245-1 is suitable for application to concrete. For the first coat it is recommended that EP-245-1 is thinned 15-17% by T-200 in order to provide good penetration into the concrete substrate and act as primer/ sealer coat.

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, grease, 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:

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

Application Equipments

Air less Spray	Tip range 0.012-0.017 inch Pump ratio : 45/1 Air pressure : 4-6 Bar
Air Spray	Nozzle orifice 1.8-2mm Nozzle pressure: 3-5 Bar
Brush	Typically 40-50 mic can be achieved.
Roller	Typically 40-50 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	10 to 30 °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.