

CODE :EP-211

PRODUCT NAME:

High performance Polyamide Cured Zinc Rich&M.I.O Epoxy Primer

DESCRIPTION :

EP-211 is a two components, fast drying, polyamide cured zinc rich and M.I.O epoxy primer, providing excellent protection against corrosion. It gives a cathodic protection film on structures machinery, pipes and tanks exteriors, deck of ships, piers, offshore, platforms and related structures.

EP-211 is compatible with the most types of organic topcoats systems. It is suitable for repairing zinc silicate, galvanized steel and other zinc coated like all primers, EP-211 alone is not suitable for immersion in acid or alkaline solutions

TECHNICAL DATA:

Binder	Epoxy resin
Pigment	Zinc dust & Anticorrosive pigments(M.I.O)
Salt Spray	1000 Hr
Finish	Flat
Shade	Grey
Specific gravity after mixing	2 ± 0.1 Kg/Lit
Volume solids	68± 3%
Flash point	25 °C
Typical dry film thickness	65-80 Microns per one coat
Number of coat	One
Mixing ratio by weight	Base : 100 parts Hardener : 16 parts
Substrate	Blasted steel
Application method	Conventional or airless spray , brush , roller
Thinner / Cleaner	T-200
Weight of added thinner	10%
Induction Time at 25 °C	20-30 minutes
Theoretical spreading rate (75mic)	9.1 M ² /Lit
Temperature resistance	Up to 140°C
Packing	Base : 25 Kg Hardener : 4 Kg
Shelf life(cool and dry place)	Base: 12 Months Hardener: 12 Months



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Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	120 minutes	12 hours	10 hours	60 day*s	12 days
25°C	45 minutes	8 hours	8 hours	45 days*	7 days
40°C	25 minutes	6 hours	4 hours days*	30	3 days

*Several months when free from zinc salts and contamination. Zinc rich primers can form zinc salts on the surface so should not be exposed to long periods prior to over coating.

Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	8 hours	5 hours	3 hours

Surface preparation

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

Fresh water wash or fresh water wash with high pressure, as appropriate, and remove all oil or grease, soluble contaminants, and other detrimental foreign matter in accordance with SSPC-SP1 solvent cleaning.

Where necessary, remove weld spatter, and where required smooth weld seams and sharp edges. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast cleaning

Abrasive blast cleans to Sa 2½(ISO 8501-1:1988) or SSPC-SP10. If oxidation has occurred between blasting and application of EP-211, the surface should be reblasted to the specified visual standard. For thin layer systems a sharp, angular surface profile of 35-50 microns is recommended. For heavy duty systems angular surface profile of 50-80 microns is recommended.



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Shop primed Steelwork

EP-211 is suitable for application to steelwork freshly coated with zinc silicate shop primers. If the shop primer show extensive or widely scattered breakdown, or excessive zinc corrosion products, overall sweep blasting will be necessary. Other types of shop primer are not suitable for overcoating and will require complete removal by abrasive blast cleaning.

Weld seams and damaged areas should be cleaned to SA 2 ½ (ISO 8501-1:1988) or SSPC10.

-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.

- Apply EP-211 as soon as possible after surface preparation to prevent rusting.

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	Tip range 0.017-0.021 inch Total output pressure at spray tip not less than 141 Bar (2000 psi)
Air Spray	Nozzle orificel 1.8-2.2mm Nozzle pressure: 3-6 Bar (43-87 psi)
Brush	Typically 50-60 mic can be achieved.
Roller	Typically 50-60 mic can be achieved.

Flush Equipment with recommended Cleaner before and after use



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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.