

CODE: EP-220

PRODUCT NAME:

Two Components Multipurpose Epoxy Amine Adduct Primer

DESCRIPTION:

EP-220 is a special two component primer with excellent adhesion and anti-corrosive properties and water resistance for structural steel, machinery, pipes and tank exteriors in paper mills, oil refineries, power plants, chemical process and waste treatment plants as well as decks, superstructures of ships, barges and workboats.

With the proper topcoats, forms durable coating systems, withstands splash or spillage of water, solvents, chemicals and petroleum products. Suitable topcoats are Epoxies, Coal tar epoxies.

TECHNICAL DATA:

| | |
|--|--|
| Binder | Epoxy resin(Hardener : Amine Adduct) |
| Pigment | Suitable Anti corrosive pigments |
| Finish | Flat |
| Shade | Gray, White, Green, Red brown, Pink |
| Specific gravity after mixing | 1.4±0.1 Kg/Lit |
| Volume solid | 55±3% |
| Flash point | 27 °C |
| Typical dry film thickness | 75-150 Microns |
| 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 | 5-7 % |
| Induction time at 25 °C | 10 minutes |
| Theoretical spreading rate (at 100 microns) | 5.5 M ² /Lit |
| Packing | Base : 25 Kg Hardener : 4 Kg |
| Shelf life | 12 Months |

Drying Time

| Temp | Touch dry | Hard dry | Overcoating | | Full Cure |
|------|-----------|----------|-------------|---------|-----------|
| | | | Min | Max | |
| 15°C | 6 hours | 18 hours | 18 hours | 6months | 14 days |
| 25°C | 2 hours | 7 hours | 7 hours | 6months | 7 days |
| 40°C | 1 hours | 3 hours | 3 hours | 6months | 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 | 10 hours | 7 hours | 3 hours |

Surface Preparation

It is essential to remove all soluble, oil, grease, drilling and cutting compounds and other surface contaminants prior to further surface preparation or painting of the steel. Recommended procedures are described in international standard ISO 8504:1992(E) and SSPC-SP1.

Note: Painting over surface, which have not sufficiently dried out, will result in blistering and flaking of the paint coating as the trapped moisture gradually escaped.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2 ½(ISO 8501-1:1988) or SSPC-SP10 .If oxidation has occurred between blasting and application of EP-220, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

The grade of blasting suitable for a particular coating specification depends on a number of factors, the most important of which is the type of coating system selected.

A surface profile of 40-60 microns is recommended.

Shop primed Steelwork

EP-220 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 Sa2 ½(ISO 8501-1:1988) or SSPC-SP10.

Surface preparation shall not take place in 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) Out side day light hours on exterior locations.

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 0.015-0.021inch Total output pressure at spray tip not less than 176 Bar (2500 psi) |
| Air Spray | Nozzle Orifice:1.8-2.2mm Nozzle Pressure:3-5 Bar (43-72 psi) |
| Brush | Typically 60-70 mic can be achieved. |
| Roller | Typically 60-70 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 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.

Under License C



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