

CODE: EP-320

PRODUCT NAME:

Solvent - Free, Epoxy Mortar (Two comp.)

Under License



Approved by



DESCRIPTION:

EP-320 is a two component solvent -free heavy duty epoxy mortar suitable for repair of damaged concrete surfaces.

It may be used for horizontal repair of concrete in a wide variety of industrial situations, including areas where the reinforcing bar is exposed.

EP-320 may be applied at high thickness in areas which will subsequently be exposed to heavy loading and abrasion on primed concrete surface and its suitable topcoat is EP- 360.

EP-320 is a solvent-free epoxy based screed of high strength combined with excellent chemical resistance.

TECHNICAL DATA:

Binder	Epoxy polyamine
Pigment	Chemical resistant pigment
Finish	Matt
Shade	Grey , brown
Specific gravity after mixing	0.9 ±0.1 Kg/Lit
Volume solid	100 %
Flash point	80 °C
Typical dry film thickness	Max 3mm
Number of coat	One or more
Mixing ratio by weight	Base : 100 parts Hardener : 50 parts
Substrate	Primed concrete
Application method	Trowel
Theoretical spreading rate (at 3 mm)	0.3 M ² /Lit
Cleaner	T-C-200
Packing	Base : 20 kg Hardener : 10 kg
Shelf life	12 Months

Mechanical Properties (After Full Curing)

Compressive strength	Aprox. 12000-14000 psi
Flexural strength	Approx.4800 psi
Tensile Elongation	3-8%
Tensile strength	Approx.2500 psi
Adhesion to concrete	350 psi (concrete Fails)

EP-320/1

Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	9 hours	48 hours	32 hours	-	13 days
25°C	5 hours	36 hours	24 hours	-	7 days
40°C	3 hours	27 hours	18 hours	-	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	90 minutes	1 hour	20 minutes

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 ISO8504:1992. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Concrete Surfaces

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 and dry.

Primed surfaces

EP-320 can be applied over approved primers. The primer surface should be dry and free from all contamination, and EP-320 must be applied within the overcoating intervals specified. Area of breakdown, damage, etc, should be prepared to the specified standard (eg. Sa 2½(ISO 8501-1:1998), or SSPC-SP6, abrasive blasting, or SSPC-SP11, (hand/ power cleaning) and patch primed prior to the application of EP-320.

Surface preparation shall not take place in following conditions:

A-At temperature below 5 °C.

B-When the relative humidity greater than 60%.

C-When the surface temperature is less than 3 °C above the dew point.

D- Out side day light hours on exterior locations

REPAIR:

- Damaged concrete must be cut back to sound material e.g. by use of pneumatic tools.
- All concrete contaminated with acids, chlorides, etc. must be remove.
- Repair layer must not be applied in thickness exceeding 12 Cm, but if thicker layers are required, then application may be built up layer by layer, leaving 1 hour between each coat.
- If overcoating with itself or other coatings, surface must be kept free of condensation, moisture and direct sunlight between coats.
- Remove dust, dirt and contamination before recoating.

EP-320/2

APPLICATION METHOD:

Like all high performance coating, this product must be applied as recommended to obtain the maximum protection for which this coating is formulated.

- Flush equipment with recommended cleaner before use.
- Stir pigmented base until homogenous.
- Add hardener to base in the proper mixing proportions, and continue stirring for 5 minutes.
- Since the pot life is limited and shortened by high temperatures, do not mix more material than will be used within the pot life period.
- Do not thin for any reason.**
- EP-320 is applied by trowel, or wide putty knife, spreading and working it into cracks and voids.
- 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

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.

EP-320/3



Approved by

