

EpoPlast Resin based Mortar

Technical Information

❖ 3 – Part Resin based Mortar for Brick and Tile Lining for protection against Acid/Alkali attacks.

Description:

- ❖ EpoPlast Resin based Mortar is a Resin based Mortar based on a selected Epoxy Resin. It is resistant to most Alkalis and many organic solvents. It is unaffected by salt solutions, water, oils and many other alkalis.
- ❖ The liquid binder is a Epoxy resin based. The Viscosity of the binder is carefully controlled to ensure easy, uniform mixing with filler. The mortar cures by internal chemical action to form a non-porous mortar, which has excellent adhesion to ceramic, metals as well as concrete.

Base:

Epoxy Resin

Material Group:

Mortars, Jointing Materials

Properties:

- ❖ Excellent Protection against almost all Alkali attacks
- Quick Curing/Setting and Easy Application
- ❖ Working upto temperature of 80 °C

Physical Data as Per IS: 4832 (Part II) - 1969:

Property	Value
Maximum Temperature	100 °C
Standard Colour	White
Density lbs/cu ft.	106
Tensile Strength psi.	1600
Compressive Strength psi.	10000
Bond Strength psi.	340
Water Absorption %	0.3
Linear Shrinkage %	0.6
Working Time at 26 °C	34 min
Initial Setting Time at 26 °C	120 min



Surface:

- ❖ Steel: The Steel structure should be free of rust and dust particles. The structure should be in leak proof condition and have passed Hydraulic Test for atleast 72 hours. If not, the structure is to be rectified using Sand Blasting and application of Primer of proper surface.
- ❖ RCC: The RCC structures and other area should be compact and sound without any honey combings. It should be in totally leak-proof condition by ascertaining Hydraulic (Water Test) for 72 hours and if any leakages, seepages are found they are to be repaired by pressure grouting from outside.

Packaging / Shelf Life:

Item Type	Packing Type	Content	Shelf Life
EpoPlast Resin	MS/HDPE Drums	35/50/220 Kg	12 Months
EpoPlast Resin Hardener	Carboy	10/30/50 Kg	12 Months
EpoPlast Resin Powder	Bags	50 Kg	12 Months

Mixing Ratio / Consumption:

	Parts by Weight
EpoPlast Resin	100
EpoPlast Resin Hardener	50
EpoPlast Resin Powder	350

Bricks or tiles are to be applied in such a way that the thickness of bedding is min. 4 mm and max. 8 mm.

Consumption of Mortar:

- \Leftrightarrow Approx. 15 kg/m² for 20 mm Tiles
- ❖ Approx. 14 kg/m² for 12 mm Tiles

Working Time:

❖ Approximately 35-40 minutes at 20 °C

Curing Time:

- ❖ Approx. 6 hours at 15 °C
- ❖ Approx. 4 hours at 20 °C
- ❖ Approx. 3 hours at 25 °C





Application:

- ❖ Mortar is made slowly by mixing the powder into the solution. Mortar of suitable consistency for laying acid-proof tiles is prepared.
- ❖ Best results are obtained by making small batches of mortar. Joints between tiles should be as thin as practically possible, preferably 3 to 4 mm. Once the mortar has started to gel, it cannot be reworked and must be discarded.

Major Areas of Application:

- Chlor- Alkali Industries
- Paper- Pulp Industries
- Phosphoric acid and Fertilizer Productions
- Reinforced Plastics for Floors
- **❖** Transportation and Storage of corrosive chemicals
- Electrical Insulation

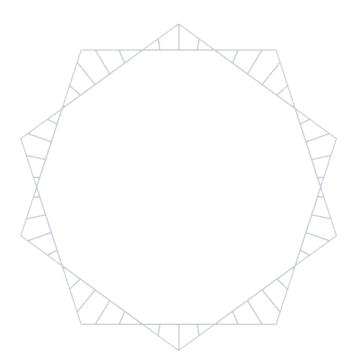
Safety Measures:

- Some contents for the Mortar are volatile and hence the mortar is to be prepared in highly ventilated areas only. Proper ventilation is to be provided for structures such as high Towers.
- Any material should not be exposed to high temperatures or be near any fire or flames. The solution is highly inflammable and hence activities such as smoking for lighting a fire nearby is not advised.
- ❖ Do not expose materials to heat or open flame. This applies in particular to welding works (weld beads). Avoid direct contact of the material with the skin. Wash hands with soap and water; do not clean the skin with solvents.
- ❖ Kindly go through the Mateial Safety Data sheet for further information.



Cleaning of Equipment:

❖ Working tools which are contaminated with not fully cured material can be cleaned by removing the material by striking gently with hammer or by removing the material with spare Chisel or Trowel. For better cleaning, Epoxy Thinner may be used to remove the excess material.



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