YASMO MISR
CHEMICALS FOR CONSTRUCTION

21 Takseem el Awkaf Sawah Square behind Kobba palace
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EPICHOR 1618

TECHNICAL DATA SHEET

1.0 Description:

- Solvent Free 2 component clear Epoxy for heavy duty and industrial floors.

2.0 Uses:

- As solvent free Epoxy primer to concrete prior to epoxy paints.
- As epoxy patch repairing mortar for concrete exposed to heavy mechanical wear traffic e.g., Factories, Hospitals, Stores, Industrial areas, cooling & freezing rooms for its durability against thermal shock.

3.0 Approval &Certification:

VOC	: SCAQMD Rule 1113, effective Feb 5 2016
Pull off to Concrete	: ASTM D7234

4.0 Colours:

Clear Liquid

5.0 Product Data:

Solid Content	: 99.00 %±1
Density	: 1.00 gm/cm^3
VOC	: 81.00 gm/l (pass)
Pull off to Concrete	: 1.98 N/mm^2

Notes: All above data is for the final mixed components.

6.0 Film thickness per coat:

Wet Film Thickness	:	150 – 200	Micron (on non-porous substrate)
	:	200 – 250	Micron (on porous substrate)
Dry Film Thickness	:	150 – 200	Micron (on non-porous substrate)
	:	200 – 250	Micron (on porous substrate)
Consumption	:	150 – 200	gm/m^2 on non-porous substrate
	:	200 – 250	gm/m^2 on porous substrate

Note: EPICHOR 1618 on porous surface ex: concrete, might not form any thickness as it might be completely absorbed especially if the porosity of the concrete is quite high.

7.0 Surface Preparation:

- Substrate shall be Reinforced concrete with suitable dimension and steel reinforcement.
- Stress shall not be less than 300 kg/cm^2 or according to project specification.
- Expansion & contraction joints shall be suitable to concrete slab dimensions.
- Application of Expansion & contraction joints shall be put into consideration to make sure that it complies with the proceeding self-levelling epoxy coat.
- Suitable trowelling should be taken into consideration because:
  - Delayed Trowelling will force addition of excess water that shall cause separation of that above weak layer of cement + water.
  - Early trowelling will cause irregularities to the surface.
  - Extra trowelling will cause extra smooth surface.

- If epoxy finishing is to be applied surface hardener, sprinkled cement shall not be applied while finishing the concrete surface or itching to the surface should take place.
- Curing concrete with water for minimum 7 days after casting.
- Deviation in levels of the concrete floor shall be within acceptable limits.

Preparation of Concrete Surface after curing:

- Substrate should be free of oil grease, dust, or any other dirt.
- Surface should be blasted using disc Grinder or similar equipment to increase the surface area for maximum adhesion of proceeding layers.
- All weak or separated layers in concrete should be removed.
- Repair any damaged areas using Epoxy paste if below 0.5m or Epichor1618 mortar if above 0.5
- Ensure the moisture of substrate content is below 3% before application.

8.0 Application Methods:

8.1 As Primer:

1. Clean the substrate and remove all foreign materials and weak or separated layers in the substrate.
2. Wear gloves & eye goggles, before application.
3. Add the resin to the hardener in a suitable container and mix well.
4. Using a brush or woollen roller paint the substrate.
5. Clean tools using solvent ex.: Thinner.

8.2 As Patch Repair Mortar:

1. Add the resin EPICHOR 1618 to the hardener in a suitable container & mix well .
2. Start adding the filling material F1 gradually to the mixture with continuous stirring until reaching a homogeneous state.

	Resin + Hardener	:	Filling Material (F1)	
Ratio	1	:	8	by weight for horizontal app
	1	:	12	by weight for vertical app

3. The mortar is then spread uniformly all over the area by means of a trowel with the required thickness, preferred trowelling machine within a period that should not exceed 30min after mixing.
4. Leave to cure for 24 hours.

8.3 As Grouting:

Using a rubber wipe, start grouting EPICHOR 1618 on the needed substrate.

9.0 Product mixing Ration by weight:

Resin : Hardener	: 1.66 : 1.00 by weight
Container	: Sealed pre weighed Steel Containers

Notes:

- *Product components shall not be divided as total weight of each shall be totally used.*
- *Mixed components should be transferred to a third container and remixing should take place.*

10.0 Pot life, Drying and curing time:

Initial Curing Time	: 24	hours at 24^{0}C
Final Curing Time	: 7	days at 24^{0}C
Pot Life	: 30	min. at 24^{0}C

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Walk on Time	: 48 hours at 24^{0}C
Recoating	: Duration between any two successive coats shall not exceed 1week otherwise, repriming should take place.

11.0 Disclaimer:

- The information in this document is given to the best of our knowledge, based on laboratory testing and practical experience. We cannot guarantee anything but the above-mentioned quality of the products themselves. Minor product variations may be implemented to comply with local requirements. We reserve the right to change the given data without further notice. Users should always consult us for specific guidance on the general suitability of this product for their needs and specific application practices.
- Samples of any approved delivered materials shall be retested after delivery.
- These products are for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to our technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to our responsible representative for approval before commencing the work.

12.0 Handling of Epoxy Products:

- Avoid contact with eyes and skin. Emergency showers and eyewash stations should be readily accessible.
- Adhere to work practice rules established by government regulations.
- Use personal protective equipment.
- When using, do not eat, drink, or smoke.

13.0 Compatibility:

- Primers applied prior to specified product shall always be epoxy based products.
- For Floor Repairing and fixing defects, product shall always be epoxy based products
- Recoating can be epoxy or polyurethanes products.

14.0 First aid Measures:

- General advice: Seek medical advice. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
- Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible, to do so without delay. Initiate and maintain gentle and continuous irrigation.
- Take off contaminated clothing and shoes immediately.
- Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- Inhalation: Move to fresh air.

15.0 Storage:

- Store in steel containers, above ground, and surrounded by dikes to contain spills or leaks.
- Do not store in humid or extra hot weathering conditions.
- Keep containers tightly closed away from heat &in dry, cool, and well-ventilated place.