

ShaliFix[®] EM 51

3K Solvent Free, Thixotropic High Strength Epoxy Mortar



STP Limited

Description

ShaliFix[®] EM 51 is a 100% solid, solvent free, high performance, non-slumping, three-component, consisting of an epoxy resin, hardener and selected graded filler, providing a tough and resilient, surface when compared to concrete.

ShaliFix[®] EM 51 can be used as multipurpose repair and adhesive mortar including bedding mortar, adhesive and non-sag concrete repair mortar for the vertical & overhead surface.

ShaliFix[®] EM 51 mortar may be applied at thickness of maximum 30 mm per layer. It conforms to ASTM C 395 - 01 (2012).

Characteristics

Compressive Strength, MPa 1 day 7 days	> 60 > 80	Consumption per mm, kg / m ²	2 - 2.2
		Flexural Strength after 14 days @ 30°C, MPa	> 24
		Tensile Strength after 14 days @ 30°C, MPa	> 8
Mix Density @ 30°C, gm / cc	2.02 ± 0.05	Tensile adhesion strength after 7 days @ 30°C, MPa	≥ 9 (Concrete failure)
Mixing ratio (A : B : C), by weight	2:1:3	Pot Life @ 30°C, 100 gm, Minutes	20 - 30

Application

- Apron / Taxi area in airports
- Car parks and workshops
- Warehouses
- Dairies / Food & Beverages production facilities
- Chemical / Fertilizers Plants
- Metal treating plants

Advantages

- Solvent free. No odour during application.
- Provides non-absorbent, non-dusting, durable, chemical resistant surface.
- Hardens without shrinkage.
- No sagging on vertical and overhead surfaces.
- High tensile and high compressive strength.
- Slip resistant - different textures available to suit different conditions.

Application Methodology

➤ Surface Preparation

- **New Concrete surface**
 - Ensure that concrete should be at least 28 days old and moisture content is < 5%.
 - Ensure that surface is sound and free from dust, laitance and other contaminants
 - Remove any oil, grease etc. by acid etching or by burning.
 - Allow the surface to dry.
- **Old Concrete surface**
 - Ensure a sound cleaned substrate and remove all laitance deposits by light mechanical scabbing, grinding or grit blasting.
 - Remove any oil, grease etc. by acid etching or by burning.
 - Repair any damage or surface irregularity with **ShaliFix[®] EM 51**.

➤ Material Preparation

- Mix entire Comp B (Hardener) into entire Comp A (Resin) for 3 minutes, both of which are pre- weighed, thoroughly by using a drill mixer fitted with suitable paddle till a homogenous mix is obtained.
- Add entire pre-weighed Comp C (Filler) in the above mixture and mix for additional 2 minutes or until all aggregate pieces are completely covered by the epoxy.

➤ Application of Material

- Priming is not normally required provided the substrate is sound, untreated and good quality non-porous concrete.
- If any doubts exist on the quality of the concrete or if it is porous, prime the surface with **ShaliBond® 41**. Care must be taken to mix the entire pre-weighed component as directed.
- Allow the primer to achieve tack free condition.
- Apply the prepared mixed **ShaliFix® EM 51** immediately on the substrate with a spatula, trowel, notched trowel or hands protected with gloves, compact well and finally smooth off well with a steel trowel
- **ShaliFix® EM 51** should be applied on layers if thickness is more than 30 mm

Cleaning & Maintenance

Clean all tools immediately after use with **STP Epoxy Thinner**. Do not allow the material to harden.

Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packing

Available in 6 kg combo pack consisting of 2 Kg Component A (Resin), 1 Kg Component B (Hardener) and 3 Kg Component C (Filler).

Available in 18 kg combo pack consisting of 6 Kg Component A (Resin), 3 Kg Component B (Hardener) and 9 Kg Component C (Filler).

Storage

Store in a cool dry place, under shed, away from heat.

Shelf Life

12 months in original unopened sealed conditions.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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