STERLING® TECHNOTRADE
The Specialist Construction Chemical Company

TechnoFix® Epomast 300

High Build Solvent free Epoxy Resinous lining And benching mortar.

Description:

TechnoFix®Epomast 300 is a multi-component, low odour, non-sag and chemically resistant solvent free epoxy resinous mortar specifically developed for use with maximum chemical and abrasion resistance for protection of concrete and other substrate in aggressive conditions like sewage tanks and manholes. When used in conjunction with either TechnoSeal® PrimePlus Primer the product provides excellent adhesion to concrete materials.

TechnoFix®Epomast 300 consists of an unique blend of specially selected fillers and high purity resins that form an easily finished impervious thixotropic lining and benching mortar with high build characteristics for protection of concrete combined with optimum chemical and mechanical resistance.

When finished correctly, TechnoFix®Epomast 300 provides an impermeable layer with good resistance to abrasion, weathering and chemical attack. TechnoFix®Epomast 300 has a strength that exceeds normal concrete strength and will cure in damp conditions as well.

Application Includes:

TechnoFix®Epomast 300 can be applied to most commonly encountered building materials such as concrete, blockwork, brickwork, clay pipes and iron.

Typical applications include:

- Lining and benching manholes.
- Sewage digester tanks.
- Water retaining structures.
- Wherever an impervious lining or mortar is required with maximum chemical resistance.

Features:

- Pre-weighed quality controlled materials ensure consistency and reduce risk of site errors.
- Unaffected by a wide range of acids, alkalis and industrial chemicals.
- Much stronger than typical concrete.
- Excellent resistance to abrasion and impact.
- Will cure under damp conditions.
- Cured surface is impermeable to water.
- Superior chemical and physical bond to virtually all substrates, dry or damp.
- Early strength development minimises maintenance disruption.
- Designed for easy laying to a fair finish.

Directions for use

Substrate preparation

Proper surface preparation is the key to any successful repair application using TechnoFix®Epomast 300. The surface must be structurally sound, free from oil, grease and other forms of contamination. Concrete surface should be dry and suitably prepared either by scrabbling or grit blasting to remove any surface laitance. Steel surfaces should be grit blasted to remove all rust and scale. Cement laitance should be removed by wire brushing or grit sand blasting before priming with TechnoSeal® PrimePlus.

Substrate priming

Thoroughly mix base and hardener components of the primer for 3 to 4 minutes and apply evenly to the substrate using a stiff brush. The contents of the container must be used within 45 minutes of mixing at 25°C. Priming should be carried out in advance of application of the mortar. It is essential to apply the mortar on top of the primer whilst the latter is still tacky. If the first priming coat should gel, apply a second priming coat before applying the mortar.

Mixing

Care should be taken to ensure that TechnoFix®Epomast 300 is thoroughly mixed to produce a fully homogeneous, trowellable mortar. TechnoFix®Epomast 300 must be mixed mechanically. The 'hardener' and 'base' components should be stirred thoroughly in order to disperse any settlement before mixing them together. The entire contents of the 'hardener' container should then be emptied into the 'base' container and manually mixed for 3 minutes, then emptied into a forced action mixer of adequate capacity. Add the filler component slowly with the mixer running and continue for 2 to 3 minutes until all the components are thoroughly blended. Under no circumstances should part packs be used.

Typical Properties at 20°C

Mixed Appearance	Thick grey paste
Tensile strength (ASTM C 307)	>7 N/mm2 @ 7 days
Flexural strength (ASTM C 580)	>15 N/mm2 @ 7 days
Slant shear bond strength(ASTM C 882)	> 30 N/mm2 @ 7 days
Fresh wet density	1.9 ± 0.1 g/cm3 (fully compacted)
Initial curing Time	>24 hrs
Full cure	7 days
Compressive Strengths (ASTM C 579)	≥60 N/mm2 @ 7 days
Pot Life	45 mins
Chemical resistance	Excellent

*All technical data stated herein is based on tests carried out under laboratory conditions.

Health and Safety instructions

Some people are sensitive to resins so gloves and a barrier cream should be used when handling TechnoFix®Epomast 300. If contact with the resin occurs, it must be removed, before it hardens, with a resin removing cream. Follow by washing with soap and water. Do not use solvent. The use of goggles is recommended but should accidental eye contamination occur, wash thoroughly with plenty of water and seek medical treatment immediately.

Ensure adequate ventilation in volume and pattern in working area and do not smoke during use. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment.

Product only for professional use.

EDITION: 10/2019/001
IDENTIFICATION NO: PD-380

Please note that this datasheet supersedes all previous versions.

Placement

Apply the mixed mortar immediately after mixing on the tacky primed surface firmly with a steel trowel or spatula. For vertical and overhead surfaces the mortar is to be applied at a maximum thickness of 10mm to avoid sagging. However, for additional build ups, the epoxy mortar can be applied at thicknesses up to 30mm in the second layer. The second layer of application is to be done only after the first coat has achieved its initial cure i.e., after 24 hours of application. If a further layer is to be applied then the surface shall be cross hatched to get the mechanical key when the render is still wet. Further priming is required if the second layer is to be applied after a period of 36 hours of application of the first layer.

Finishing

TechnoFix®Epomast 300 is finished by the use of a wood float and closed with a steel trowel. The completed surface should not be overworked.

Curing

TechnoFix®Epomast 300 should be allowed to cure for 24 hours at 20°C before being subjected to foot traffic. At the same temperature, full mechanical and chemical properties are achieved after 7 days (please consult our Technical Department for details of curing times at other temperatures).

Cleaning

Tools and equipments should be cleaned within the pot life of the grout with TechnoFix® Eco Cleaner. Cured material can only be removed mechanically.

Packaging

TechnoFix®Epomast 300 is supplied in 20 kg composite packs. Packaging size may vary subject to local regulations and requirements.

Shelf Life & Storage

24 months from date of production if kept in undamaged and unopened original sealed containers and store at protected area from direct sunshine in dry and cool condition at temperatures between 10°C-30°C.

Limitations

- TechnoFix®Epomast 300 should not be used when the temperature is below 5°C and falling.
- Do not mix part packs under any circumstances.
- TechnoFix®Epomast 300 should not be exposed to moving water during application. Exposure to heavy rainfall prior to the final set may result in surface scour. If any doubts arise concerning temperature or substrate conditions, consult our Technical representative.
- The material should not be applied at less than 5 mm thickness.
- Greater thicknesses than those specified above can be achieved by the application of subsequent layers.
- Larger areas should be applied in a 'chequer board' fashion.

STERLING TECHNOTRADE INDIA PRIVATE LIMITED
The Specialist Construction Chemical Company®
Head Office: 109-111-112, 1st Floor, Vijaya Building, No. 17, Barakhamba Road, Connaught Place, New Delhi- 110001
Manufacturing Unit: Plot No-J-3, UPSIDC Site C, Surajpur Industrial Area, Greater Noida, Uttar Pradesh 201306
WEB: sterlingtechnotrade.com |**EMAIL:** support@sterlingtechnotrade.com | **TEL:** 01145084212