

Sikadur®-43

Epoxy resin mortar

Product Description

A solvent free repair and filling mortar, based on a combination of epoxy resins and selected high strength aggregates. After mixing, it forms a trowellable mortar with good adhesion to cement bound surfaces.

Uses

Sikadur®-43 is a high strength material that is used as bedding or underfilling mortar or to repair horizontal concrete surfaces such as :

- Industrial Floors
- Kerbstones
- Joint arises in the Highways
- Bridge Decks
- Concrete Runways

Characteristics / Advantages

Sikadur®-43 is an economical material with following advantages :

- Solvent free
- Shrinkage free hardening
- High mechanical strength
- Curing is not affected by high humidity
- Suitable for both dry and damp surfaces
- Rapid hardening
- Abrasion and impact resistant

Product Data

Form

Appearance /Colours

Part A: light yellow, liquid
Part B: light yellow, liquid
Part C: sand colour, powder
Parts A+B+C mixed: sandy grey

Packaging

13.2 kg (A+B+C) Pre-batched unit.

Part A: 0.80 kg plastic container
Part B: 0.40 kg plastic container
Part C: 12.00 kg bag

Storage

Storage Conditions/ Shelf-Life

12 months from date of production if stored properly in original unopened, sealed and undamaged packaging, in dry conditions at temperatures between +5°C and +40°C. Protect from direct sunshine.



Technical Data

Chemical Base	Epoxy resin.	
Density	~2 kg/l (Part A+B+C mixed) (at +27°C) (evacuated)	
Layer Thickness	40 mm max. When using multiple units, one after the other. Do not mix the following unit until the previous one has been used in order to avoid a reduction in handling time.	
Change of Volume	Shrinkage: Hardens without shrinkage.	(According to ASTM C 883)
Thermal Stability	Heat Deflection Temperature (HDT): HDT = +49°C (7 days / +30°C)	(According to ASTM-D 648)

Mechanical / Physical Properties


Compressive Strength	(According to ASTM C 881)	
	Curing Time	Curing Temperature (+30°C)
	1 day	> 30 N/mm ²
	14 days	> 60 N/mm ²
Flexural Strength	(According to IS 9162)	
	Curing Time	Curing Temperature (+30°C)
	7 days	20 N/mm ²
Bond Strength	3.5 N/mm ² (Concrete failure)	(According to ASTM C 882)
Tensile Strength	(According to ISO 527)	
	Curing Time	Curing Temperature (+30°C)
	14 days	<10 N/mm ²

System Information

Application Details

Consumption / Dosage	1 m ² (1 mm thickness) ~2.0 kg.
Substrate Quality	Concrete, mortar, rendering stone surfaces must be clean, sound and free from oil, grease, cement laitance, dust and other surface contaminants.
Substrate Preparation	Preparation work may be done by sand-blasting or any other mechanical means.
Priming	<p>Priming the substrate with Sikadur®-31 or Sikadur®-53 FLV is a must prior to application of Sikadur®-43.</p> <p>Sikadur®-31 is recommended for vertical/ overhead application and Sikadur®-53 FLV is suitable for horizontal application.</p> <p>Coat the surface completely with the primer using a stiff brush. Work the primer well into the surfaces. Apply Sikadur®-43 while the primer is still tacky.</p>

Application Conditions / Limitations

Substrate Temperature	+10°C min. / +40°C max.		
Ambient Temperature	+10°C min. / +40°C max.		
Material Temperature	Sikadur®-43 must be applied at a temperature between +10°C and +40°C.		
Application Instructions			
Mixing	Part A : Part B : Part C = 2 : 1 : 30 (by weight)		
Mixing Time		Pre-batched units: Mix component A & B together for at least 2 minutes with slow speed electric drill (Max. 600 rpm) until a smooth and streak-free colour is achieved. Then add Component "C" & continue mixing until homogeneous mortar is achieved. Use immediately.	
Application Method / Tools	Apply with a float, trowel or glove-protected hand depending on application. Compact well and finally smooth-off well with a clean steel trowel. When Sikadur®-43 is required to be applied to a thickness of more than 40 mm, apply in layers.		
Cleaning of Tools	Clean all tools and application equipment with Sika® Colma Cleaner immediately after use. Hardened / cured material can only be mechanically removed.		
Potlife	100 gm mass	(According to FIP 5.1)	
	Temperature	Time	
	+30°C	~ 25 minutes	
	The potlife begins when the resin and hardener are mixed. It is shorter at high temperatures and longer at low temperatures. The greater the quantity mixed, the shorter the potlife. To obtain longer workability at high temperatures, the mixed adhesive may be divided into portions. Another method is to chill parts A+B and C before mixing them (not below +5°C).		
Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.		
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.		
Legal Notes	The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.		

