

Sikadur®-43

Epoxy Resin Mortar

Product Description **Sikadur®-43** is a solvent-free, three-component, repair and filling mortar based on a combination of epoxy resins and selected high strength aggregates. Suitable for use in tropical and hot climatic conditions.

Uses **Sikadur®-43** is a high strength material that is used as a bedding or under-filling mortar (dry pack) or, to repair horizontal concrete surfaces such as

- Industrial floors
- Kerbstones
- Bridge bearings
- Foundation slabs
- Crane rails
- Joint areas in highways
- Concrete runways
- Abrasion and impact resistant wearing layers

Advantages **Sikadur®-43** is an economical material with the following beneficial properties

- Available in two grades to suit different climates
- Solvent free
- Shrinkage-free hardening
- Curing is not affected by high humidity
- Rapid hardening also at low temperatures
- Abrasion and impact resistant

Test report EMPA; Federal Material Testing Laboratory (Dübendorf, Switzerland)

Product Data

Type Epoxy resin, curing agent and selected quartz aggregates

Form Grey (Component A: Yellowish, Component B: Brownish, Component C: sand)

Packaging 10 kg units (A+B+C)

Storage Condition Store in a dry area between 5°C and 35°C. Protect from direct sunlight.

Shelf life 12 months minimum from production date if stored properly in original unopened packaging.

Technical Data

Density Approximately 2.0 kg/lit

Mixing ratio Comp. A: B: C = 2:1:30 parts by weight Normal /LP



Mechanical strengths	Normal:	LP Type:
	(after 10 days at 20°C, 65% rH)	(after 10 days 20°C, 65%rH)
Compressive strength	70 - 80 N/mm ²	50 - 60 N/mm ²
Flexural strength	20 - 25 N/mm ²	15 - 20 N/mm ²
Bond strength to concrete (primed with A+B, 1day, LP35°C)	4 N/mm ² (concrete failure)	4 N/mm ² (concrete failure)
Bond strength to steel (DIN 53232)	10 N/mm ²	10 N/mm ²

pot Life	Test Temperature	10 kg Normal	2 kg Normal	10 kg L.P	2 kg L.P
	40° C	--	--	--	~30 min
30° C	~20 min	~30 min	~30 min	~ 45 min	~ 100 min
20° C	~ 40 min	~60 min	~60 min	~ 60 min	~ 200 min
10° C	~ 75 min	~ 2 hrs	~ 2 hrs	--	--
5° C	~ 90 min	~ 2 ½ hrs	~ 2 ½ hrs	--	--

Coefficient of thermal expansion 21 x 10⁻⁶ per °C (temp. range: -20°C to +60°C)

Modulus of elasticity 7 000 N/mm² (static)

Application Details

Substrate preparation All surfaces must be clean, sound, free from dust, grease, oils, standing water and all loosely adhering particles. Cement laitance must be removed and the surfaces to be treated must be mechanically roughened. Concrete must be at least 3 weeks old, depending on climate. Metal surfaces (steel and iron) should be free from scale, rust, oil and grease.

Priming Prime with **Sikadur®-43** components A + B or Sikafloor 156. On damp substrates apply Sikadur-31 LP as primer. Work well into substrate.

Mixing Mix components A+B together for at least 1minute with a low speed electric drill (maximum 500 rpm). Slowly add component C and continue mixing for another 3 minutes and until a homogeneous mortar is achieved. Avoid entrapping air.

Application Whilst the primer is still tacky, spread the mixed **Sikadur®-43** and then trowel firmly into place. Tamp down well to ensure thorough compaction.

Cleaning Clean tools with Colma Cleaner before hardening of the adhesive. Hardened adhesive can only be removed mechanically.

- Remarks**
- On damp substrates (no standing water) use Sikadur-31 LP as primer, work well into substrate.
 - For external applications seal surfaces of **Sikadur®-43** mortar with Sikadur-52 epoxy resin.
 - Maximum thickness per layer for levelling or filling: 50 mm (1.5 cm for large areas)
 - Minimum thickness per layer: 5mm
 - Minimum application and substrate temperature: +5°C
 - Maximum application and substrate temperature: +40°C

Notes 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.

Safety For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Note

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 should 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



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