

Sikadur®-32

Epoxy resin bonding agent

Product Description

Sikadur®-32 is a solvent-free, two component bonding agent, based on selected epoxy resins. Complies with ASTM C 881-78 type II, Grade 2 Class B+C

Uses

Sikadur®-32 provides a bond of far greater strength than the tensile strength of the concrete itself. Therefore it is suitable for use as a structural bonding agent for :

- New to existing concrete
- Mortar
- Steel, Iron

Characteristics / Advantages

- Easy to mix and apply
- Solvent free
- Unaffected by moisture
- Highly effective even on damp surface
- Workable at low temperatures
- High tensile strength

Tests

Approval / Standards

Conforms to ASTM C 881-78, Type II, Grade 2, Class B+C.

Product Data

Form

Colours

Part A: white
Part B: black
Part A+B mixed: light grey

Packaging

3 kg (A+B) Prebatched unit
Part A: 2 kg plastic container
Part B: 1 kg plastic container

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

1.70 kg/l (Part A+B mixed) (at +27°C)

Change of Volume

Shrinkage / Creep:
Hardens without shrinkage.



Mechanical / Physical Properties

Compressive Strength

(According to ASTM C 881)

Curing time	+30°C
7 days	40 N/mm ²

Flexural Strength

(According to IS 9162-1979)

Curing time	+30°C
10 days	30 - 35 N/mm ²

Tensile Strength

(According to ISO 527)

Curing time	+30°C
14 days	18 - 20 N/mm ²

Bond Strength

(According to ASTM C 882)

Curing time	Temperature	Substrate	Bond strength
14 days	+30°C	Concrete dry	2.5 - 3 N/mm ² *

Strength Development

Confirm the strength development by producing cubes on site and testing them for compressive and flexural strength.

System Information

Application Details

Substrate Quality

Mortar and concrete must be older than 28 days (dependent on environment and strength).

Verify the substrate strength (concrete, mortar).

The substrate surface (concrete, mortar) must be clean and free from frost standing water.

Steel substrate must be de-rusted similar to Sa 2.5.

Concrete substrate must be sound and all loose particles must be removed.

Substrate Preparation

Concrete, mortar:

Substrates must be sound, dry, clean and free from laitance, ice, standing water, grease, oils, old surface treatments or coatings and all loosely adhering particles to achieve a laitance and contaminant free, open textured surface. Cement laitance must be removed and the surface to be treated must be mechanically roughened

Steel:

Must be cleaned and prepared thoroughly to an acceptable quality i.e. by blastcleaning and vacuum.

Application Conditions / Limitations

Substrate Temperature +25°C min. / +40°C max.

Ambient Temperature +25°C min. / +40°C max.

Material Temperature Sikadur[®]-32 must be at a temperature of between +10°C and +40°C for application.

Substrate Humidity When applied to mat moisture concrete, brush the adhesive well into substrate.

Application Instructions

Mixing Part A : Part B = 2 : 1 (by weight)

Mixing Time



Pre-batched units
Mix parts A+B together for at least 3 minutes with a mixing spindle attached to a slow speed electric drill (max. 600 rpm) until the material becomes smooth in consistency and a uniform grey colour. Avoid aeration while mixing. Then, pour the whole mix into a clean container and stir again for approx. 1 more minute at low speed to keep air entrapment at a minimum. Mix only that quantity which can be used within its potlife.

Application Conditions / Limitations

After mixing, apply directly to the prepared substrate by brush, roller or spray. On damp surfaces, ensure that it is well brushed in.

Pour new concrete within specified open time, as long as material is still tacky.

Coverage

0.3 – 0.8 kg/m², depending on substrate condition

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

(According to EN ISO 9514)

Temperature	Sikadur [®] -32
30°C	25 min

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 before mixing them (not below +5°C).

Open time

Temperature	Sikadur [®] -32
30°C	50 minutes

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.

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.

Transportation Class

Users shall refer to the most recent Material Safety Data Sheet

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.

