



SikaDur® 42

Rapid High Strength Pourable Epoxy Grout

Technical Data Sheet

DESCRIPTION

SikaDur 42 is a three component solvent free, rapid curing, high strength epoxy pourable grout. It is based on a special combination of epoxy resin and aggregates to allow the material to flow and self-level.

USES

- * As a levelling and repair mortar on concrete, stone, mortar, render and timber.
- * Structural bonding of starter bars and holding down bolts.
- * Grouting of bearing plates, machine bases, mechanical bridge joints, bridge bearings and rail base plates.

ADVANTAGES

- * Excellent flowability.
- * Excellent mechanical properties.
- * Rapid strength gain.
- * Can be applied in damp conditions.
- * Excellent performance and durability.
- * Easy to mix and apply.
- * Excellent bond to most construction materials.
- * High early strengths.
- * Good abrasion resistance.
- * Good chemical resistance.
- * Very good water resistance.
- * Negligible shrinkage.
- * Cures in damp and wet conditions.
- * Non corrosive to steel.
- * Factory batched for quality control.
- * Vapour proof.
- * Solvent free.
- * Low odour.
- * User friendly.

Technical Data (typical)

Colour: Grey (mixed)
Density: 2.0 kg/litre
Application temperatures: +5°C min - +30°C max (substrate and ambient)

Application thickness: 12 mm minimum
 50 mm maximum

Compressive strength gain guide (N/mm²)

| Time (days) | 1 | 3 | 7 | 14 |
|-------------|-----|-----|-----|-----|
| 5°C | - | 110 | 120 | 130 |
| 20°C | 110 | 120 | 130 | 130 |

Flexural strength: 30 N/mm² @ 20°C

Tensile strength: 20 N/mm² @ 20°C

Modulus of Elasticity: 18 KN/mm² @ 20°C
 (static)

Coefficient of Expansion: 18 x 10⁻⁶ per °C

Bond strength: Concrete: typically 4 N/mm² (concrete failure)
 Steel: typically 20 N/mm² (epoxy failure)

Shrinkage: Negligible

Pot life:

| Temp | Mins |
|------|------|
| 5°C | 90 |
| 10°C | 60 |
| 20°C | 30 |
| 30°C | 15 |

All above values are approximate.

SURFACE PREPARATION

Concrete/Brickwork/Mortar Substrates:

Surfaces must be sound, clean, free from frost, oils, grease, standing water and all loosely adhering particles and other surface contaminants. Cement laitance must be removed

Mechanically prepare surfaces by suitable approved techniques such as needle gunning, scabbling, bush hammering, water/grit blasting etc. Concrete must be at least 3-6 weeks old. Feather edging should be avoided. The edges should be square cut to at least the recommended minimum application thickness of the product.

Steel Substrate:

Prepare surfaces by removing old coatings, rust products, grease, oil etc by suitable mechanical equipment to a bright metal finish (equivalent to SA2½ Swedish standard). Apply **SikaDur 42** within 4 hours or protect reinforcement with **Sika® Armatec 110 EpoCem®**.

MIXING

Stir component A prior to mixing (resin). The whole of component A (resin) should be mixed with the whole of component B (hardener) for a minimum of 2 minutes using a slow speed electric stirrer (300 rpm) and suitable spiral or paddle mixer until a uniform mix and colour is achieved.

Then add component C (filler/aggregate) slowly and continue to mix until mixture is homogeneous. Leave **SikaDur 42** to stand in container until the majority of air bubbles have dispersed.

SUBSTRATE PRIMING

Priming is not required.

APPLICATION

Pour **SikaDur 42** into prepared opening or hopper and maintain enough head (approx 150 - 200 mm) to allow a free flow of material and avoiding the formation of air pockets. Ensure that air is displaced by the **SikaDur 42**, if necessary, by making breather holes. Use steel rods or chains to assist the flow of grout where necessary.

IMPORTANT CONSIDERATIONS

- * At higher temperatures pot life will be shortened.
- * At lower temperatures the material will become more difficult to apply and take longer to harden.
- * Wear suitable protective clothing, gloves and eye protection.
- * Do not add solvent to the mix.
- * Always ensure good ventilation when using in a confined space.
- * **Thinner C** is flammable. NO NAKED FLAMES
- * Do not mix additional fillers.

CLEANING

All tools should be cleaned with **Thinner C** immediately after use. Hardened material must be removed mechanically.

PACKAGING

Refer to latest price list.

CONSUMPTION

24 kg/m² @ 12 mm thickness
40 kg/m² @ 20 mm thickness

Excluding allowances for loss wastage surface profile and porosity.

STORAGE AND SHELF LIFE

Minimum 12 months in sealed containers stored in dry warehouse conditions (+5°C - +25°C).



Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

Important 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 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 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 Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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