Construction

Icosit® KC 340/35

2-pack Polyurethane grout for rail fixing (continuous undersealing)

Product-description

Icosit® KC 340/35 is a solvent-free 2-component elastic polyurethane grout.

Uses

- **Icosit® KC 340/35** designed as a flexible levelling and bedding material for elastic fixing of rails, in particular for embedded grooved rails (floating rail).

Characteristics / advantages

- Reduces vibration
- Insulates against stray currents
- Levels out tolerances
- Suitable as shear-resistant adhesive for rail fixing
- Insensitive to moisture
- Elastic (Shore A 40) - compressible
- Long life expectance

Product Data

Colour shades

Light grey

Packaging

Component A:	8.9 kg pail	160 kg drum
Component B:	1.1 kg tin	19.2 kg can
A + B composite unit	10 kg	179.2 kg

Conditions of storage / shelf-life

12 months from date of manufacture in cool and dry storage in unopened original containers, protected from direct sun radiation, at temperatures between + 10 °C and + 25 °C. Protect from frost.

Technical Data

Chemical base

2-component pourable polyurethane grout

Density

Component A:	approx. 0.90 kg/l	(ISO 2811-1)
Component B:	approx. 1.23 kg/l	(ISO 2811-1)
A + B	approx.0.95 kg/l	(ISO 1183-1)

Viscosity

Component A:	approx. 3.0 Pa s	mit Z 3 DIN, 20 °C
Component B:	approx. 0.14 Pa s	mit Z 3 DIN, 20 °C

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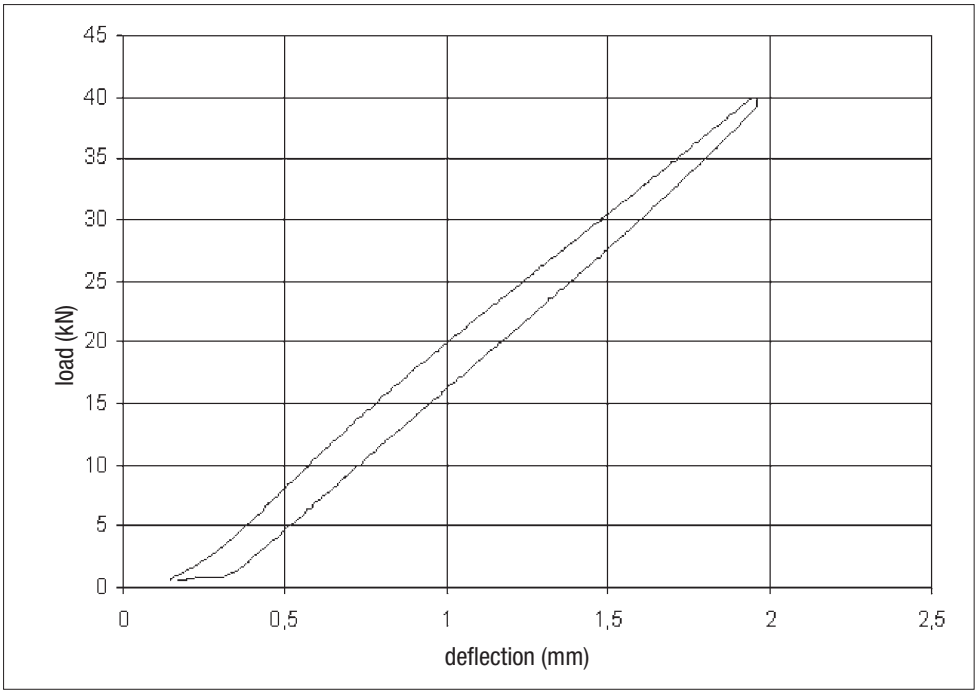
Layer thickness	Minimal approx. 15 mm Maximal 60 mm	
Temperature resistance	From - 40 °C to + 80 °C (temporarily up to + 150 °C)	
Tensile strength	0.9 N/mm²	(ISO 527)
Shore A hardness	40 ± 5 (after 28 days)	(ISO 868)
Elongation at break	Ca. 180 %	(ISO 527)
Specific electrical resistance	Ca. 1.5 x 10^9 Ω m	(DIN VDE 0100-610 und DIN IEC 93)

Spring diagram DIN 45673



Static stiffness determined analogous to DIN 45673-1.

Test specimen dimensions 1000 x 180 x 25 mm.

Spring index c = 31 kN/mm, determined as per secant method between 8 and 32 kN.

Shore-hardness serves for material identification and control of curing progress on site.

Chemical resistance

Long-term resistant against:
- Water
- Conventional detergent solutions
- Sea water
- Alkaline water

Short-term resistant against:
- Mineral oil, Diesel oil, vegetable and animal fat

Not or only short-term resistant against:
- Organic solvents (ester, ketone , aromates) and alcohol
- Solvents and thinners
- Strong lyes and acids

System Information

Consumption	0.95 kg of **Icosit® KC 340/35** per litre of volume to be filled up.
Substrate quality	Substrate must be solid, free from oil, fat, loose and friable particles. Slightly damp substrates are acceptable. Water in liquid form (droplets) must be removed (e.g. by vacuum or compressed air) before pouring **Icosit® KC 340/35**.

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Substrate preparation	**Icosit® KC 330 Primer:** To improve adhesion, absorbent substrates (concrete) should be primed. Waiting time between application of **Icosit® KC 330 Primer** and pouring of **Icosit® KC 340/35** min. 1 hour and max. 3 days. **SikaCor® 277:** If a waiting time of more than 3 days is to be expected between priming and pouring **Icosit® KC 340/35** or if a solvent-free primer or a particularly efficient corrosion protection is required, **SikaCor® 277** shall be used for priming. The freshly applied coating should immediately be blinded (broadcasted) with quartz sand 0,4 - 0,7 mm granulometry. Waiting time between application of **SikaCor® 277** and pouring of **Icosit® KC 340/35** minimum 24 hours. See individual data sheets for these products!

Application Conditions

Material temperature	Before application preferably around + 15 °C.
Substrate temperature	Minimal + 5 °C Maximal + 35 °C
Ambient temperature	Minimal + 5 °C Maximal + 35 °C
Substrate humidity	Dry to mat-damp
Relative Air Humidity	Maximal 90 %

Application Instructions

Mixing proportion	Component A : component B = 100:12 p.b.w.
Application methods / Tools	**Icosit® KC 340/35** is supplied in pre-weighed composite units A + B. Component A must be stirred up thoroughly before use. When mixing 10 kg units of component A with component B, please observe: ■ stirrer running at approx. 600 - 800 r.p.m. under load ■ mixing time approx. 60 to 80 seconds ■ make sure to also reach walls and bottom of container We recommend mixer CX 40 with stirrer WK 140 from Messrs. Collomix or mixer MXP 100 EQ with stirrer HS, 140 x 160 from Messrs. PROTOOL. For stirring up component A in 160 kg drums, we recommend gear stirrer GRS 300/1.5, equipped with three blades Ø 300 mm of Messrs. Geppert Rührtechnik GmbH. Gear stirrer has to be mounted on a drum lid which replaces the original lid during stirring. Stirring time approx. 5 minutes. Machine application of **Icosit® KC 340/35** is only feasible with specially designed 2-pack injection machines. Make sure that the correct mixing proportion is maintained and instructions of machine manufacturer are properly observed. Component A must be stirred up at regular intervals during application to ensure homogenous consistency. Observe instructions of equipment manufacturer.
Cleaning of tools	Mixing and application tools must be cleaned at regular intervals and immediately after use with **Sika® Cleaner 5**. Cured material can only be removed mechanically.
Pot life (application time)	Approx. 11 - 12 minutes at + 20 °C. After this time, the mixture becomes unserviceable. Do not add any solvents! Higher temperatures will shorten pot life!
Waiting time	Tack-free after approx. 2 h at + 20 °C Traffickable after approx. 24 h at + 20 °C

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Please Note

For easier application, we recommend a material temperature of +15 °C.

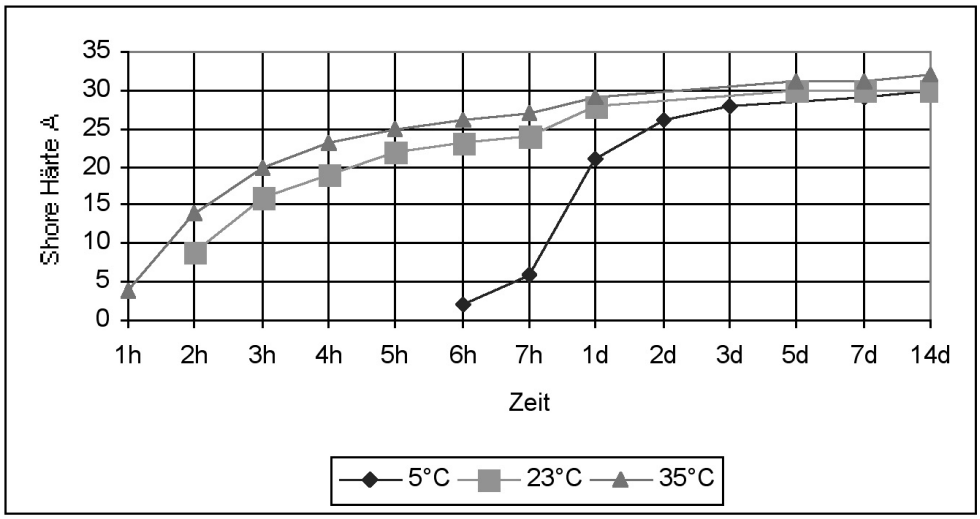
Undersealing layer thickness should be minimum 15 mm and maximum 60 mm.

To achieve maximum adhesion on concrete, loose particles and cement laitance must be removed mechanically, e.g. by blastcleaning or scabbling.

Substrate may be mat-damp. Before starting undersealing, water droplets have to be removed by vacuum or oil-freecompressed air.

Use of appropriate **Sika® Primers** will improve adhesion considerably.

Curing progress



Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country.
Please consult the local Product Data Sheet for the exact description of the application fields.

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Health and Safety Information

Protective Measures

Components A + B of **Icosit® KC 340/35** are solvent-free.
Component A falls under UN No. 3082, class 9 of the IMDG/IATA DGR transport regulations and is classified as “irritating” Component B is classified as “harmful”.
Local regulations as well as health and safety advice on containers must be observed.

Component B of **Icosit® KC 340/35** contains Isocyanate.

Isocyanate containing material may cause irritation and – under permanent exposure – sensitization of skin, eyes and respiratory tract and may also lead to allergic reactions. Allergic persons and persons tending to illness of respiratory tract should not come into contact with this kind of materials. Therefore avoid direct contact with the liquid components (chemical resistant gloves/goggles/clothing) to prevent direct contact with skin and eyes. Use only in presence of adequate general and local exhaust ventilation to prevent concentration of vapours. Use properly fitted NIOSH respirator if ventilation is poor.
Cured product (as combined with companion component) is chemically inert but very difficult to remove from skin or any objects to which it adheres. Cured product must be mechanically removed.
In case of spill, avoid direct contact. Wearing protective equipment, contain and collect spill with absorbent material and place in suitable container. Ventilate enclosed area. Do not dispose of in sewer or drain.
Dispose of spilled or excess product and container in accordance with applicable federal, state and local environmental regulations.

Prior to as well as after application use fat-free barrier cream. After completion of work clean skin with plenty of soap and water and again protect with fat-containing barrier cream.

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.

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

Important Notes

Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste in agreement with the responsible local authorities.

Detailed health and safety information as well as detailed precautionary measures e. g. physical, toxicological and ecological data can be obtained from the safety data sheet.

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 must always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.

Sika Deutschland GmbH
Kornwestheimer Str. 107
D-70439 Stuttgart/Germany
Phone +49 711 8009-0
Fax +49 711 8009-321

Stuttgarter Str. 139
D-72574 Bad Urach/Germany
Phone +49 7125 940-0
Fax +49 7125 940-321

Rieter Tal
D-71665 Vaihingen/Enz/Germany
Phone +49 7042 109-0
Fax +49 7042 109-180