

Icosit® KC GSC

2-pack, self-levelling Polyurethane Sealant

Construction

Product-description

Icosit® KC GSC is an elastic, hand applicable 2 component joint sealant based on polyurethane.

Uses

Icosit® KC GSC is designed for elastic sealing of joints between rails and adjacent concrete surfaces.

Characteristics / advantages

- Maximum permissible deformation 25 %
- Elastic
- Excellent chemical resistance
- Good mechanical resistance

Product Data

Colour shades

Grey

Packaging

Component A:	5.88 kg pail
Component B:	4.12 kg tin
A + B composite unit	10 kg

Conditions of storage / shelf-life

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

Technical Data

Chemical base

2-component, self-levelling Polyurethane joint sealant.

Density

Component A:	approx. 1.05 kg/l	(ISO 2811-1)
Component B:	approx. 1.05 kg/l	(ISO 2811-1)
A + B	approx. 1.05 kg/l	(ISO 1183-1)

Viscosity

Component A:	approx. 1.2 Pa s	mit Z 3 DIN, 20 °C
Component B:	approx. 6.5 Pa s	mit Z 3 DIN, 20 °C

Permissible Deformation 25 %

Sag resistance

Self-levelling

Joint width

Minimal width 15 mm
Maximal width 60 mm

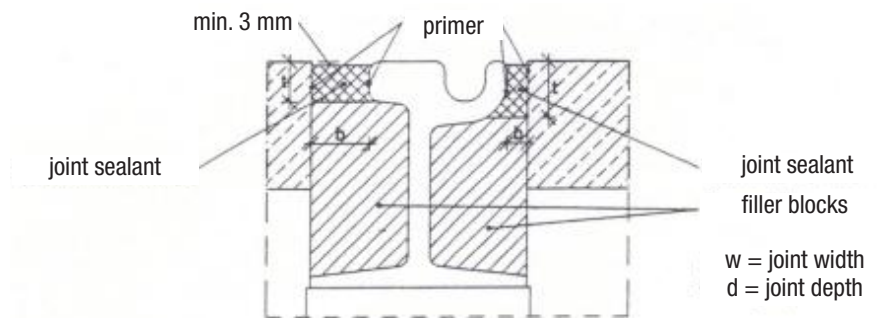
Temperature resistance From - 40 °C to + 80 °C

Tear propagation resistance	Approx. 8.3 N/mm	(DIN 53 515)
Tensile strength	Approx. 0.5 N/mm ² at 23 °C/50 % r. h.	(DIN EN ISO 8340)
Shore A hardness	Approx. 30 (after 28 days) at 23 °C/50 % r. h.	(DIN 53 505)
Elongation to break	Approx. 1000 % at 23 °C/50 % r. h.	(DIN 53 504)
Recovery	> 75 %	(DIN EN 27 389)
Chemical resistance	<p>Resistant against:</p> <ul style="list-style-type: none"> ■ Water ■ Most detergents ■ Sea water <p>Temporary resistant against:</p> <ul style="list-style-type: none"> ■ Mineral oils, Diesel fuel <p>Not or only short-term resistant against:</p> <ul style="list-style-type: none"> ■ Organic solvents (ester, ketone, aromates) and alcohol ■ Concentrated acids and lyes 	

System Information

Joint dimensions	<p>As per standard ZTV Fug-STB 01, the joint width should not exceed 60 mm and not more than 55 mm in depth.</p> <p>The minimum width is 15 mm, at a depth of 12 mm.</p> <p>The relation between width and depth of joint should remain within a proportion of 1 : 1 to 1 : 0.8.</p> <p>To prevent leakage of sealant during application, bottom and arises of joint must be tight.</p> <p>Top level of joint sealant should be kept at least 3 mm lower than top of rail.</p> <p>To limit mechanical exposure, contact between tyres and joint sealant should be avoided.</p>
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Joint design



Consumption	1.05 kg of sealant per litre of volume to be sealed.
Substrate quality	<p>Contact surfaces must be solid, clean, dry and free from oil, fat, loose particles and cement laitance.</p> <p>Steel surfaces must be free from rust (remove by blastcleaning or grinding).</p>
Substrate preparation	<p>Prime contact surfaces by brush with Icosit® KC 330 Primer (1-pack, solventcontaining Polyurethane primer); consumption approx. 0.15 kg/m²:</p> <p>Waiting time between priming and pouring of Icosit KC GSC minimum 1 hour und max. 8 hours.</p> <p>Primer acts as adhesion promoter exclusively and cannot serve as a substitute for thorough cleaning nor can it provide a strengthening effect on poor substrates.</p> <p>For more details see the respective Technical Data Sheet.</p>

Application Conditions

Material temperature Before application store preferably at approx. + 20 °C.
This applies particularly to component B.

Substrate temperature Minimal + 5 °C
Maximal + 35 °C

Ambient temperature Minimal +10 °C
Maximal + 35 °C

Substrate humidity Dry

Relative Air Humidity Maximal 70 %

Application Instructions

Mixing proportion Component A : component B = 100 : 70 p. b. w.

Application methods / Tools **Icosit® KC GSC** is supplied in composite units, i. e. both components A + B are prebatched in the right proportion.

Stir component A first, then add component B and mix thoroughly until a homogenous consistency is achieved.

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. 2 minutes
- 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.

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 Approx. 20 min at + 20 °C.
After this time, the mixture becomes unserviceable.

Do not add any solvents!
Higher temperatures will shorten potlife!

Waiting time between coats Dust-free after approx. 5 h at + 20 °C.
Serviceable after approx. 24 h at + 20 °C.

Notes on application To ease application and to facilitate emptying of tin containing B component, material temperature should preferably be + 20 °C or above.

Application of the joint sealant during tram service hours should be avoided!

Colour shade may be influenced by environmental effects (chemicals, high temperature, UV radiation) which will, however, have no negative effect on the technical performance.

Priming of contact surfaces is compulsory.

Where bituminous contact surfaces are concerned, special advice must be sought from our Technical Service Department.

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.

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.

Health and Safety Information

Protective Measures	<p>Components A + B of Icosit® KC GSC are solvent-free.</p> <p>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”.</p> <p>Local regulations as well as health and safety advice on containers must be observed.</p> <p>Component B of Icosit® KC GSC contains Isocyanate.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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Notes	<p>All technical data stated in this Product Data Sheet are based on laboratory tests.</p> <p>Actual measured data may vary due to circumstances beyond our control</p>
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Important Notes	<p>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.</p> <p>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.</p> <p>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.</p>
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