

# Icosit<sup>®</sup> KC GSC

2-pack, self-levelling Polyurethane sealant

## Product- description

Icosit KC GSC is an elastic, hand- and machine 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 shade            grey

## Packaging

component A	5,88 kg pail
component B	4,12 kg tin
A + B	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.

Construction



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## Technical data

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**Chemical base:** 2-component, self-levelling Polyurethane joint sealant.

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**Density:**

Component A	~ 1,05 kg/l	(ISO 2811-1)
component B	~ 1.05 kg/l	(ISO 2811-1)
A + B	~ 1,05 kg/l	(ISO 1183-1)

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**Viscosity:**

Component A	~ 1,2 Pa s	mit Z 3 DIN, 20 °C
component B	~ 6,5 Pa s	mit Z 3 DIN, 20 °C

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**Permissible**

25 %

**Deformation:**

**Sag resistance:**

Self-levelling

**Joint width:**

Min. width = 15 mm / max. width = 60 mm

**Temperature-resistance:**

from -40 °C to +80 °C

**Tear resistance after incision:**

~ 8,3 N/mm (DIN 53 515)

**Shore A hardness:**

~ 30 (after 28 days) at +23 °C / 50% r.h. (DIN 53 505)

**Tensile strength:**

~ 0,5 N/mm<sup>2</sup> at 23 °C / 50% r.h. (DIN EN ISO 8340)

**Elongation to break:**

~ 1000 % at 23 °C / 50% r.h. (DIN 53 504)

**Recovery:**

> 75 % (DIN EN 27 389)

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**Chemical resistance:**

Resistant against:

- water
- most detergents
- seawater

Temporary resistant against:

- mineral oils, Diesel fuel

Not or only short-term resistant against:

- Organic solvents (ester, ketone , aromates) and alcohol
  - Concentrated acids and lyes
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## System Information

**Joint dimensions:**

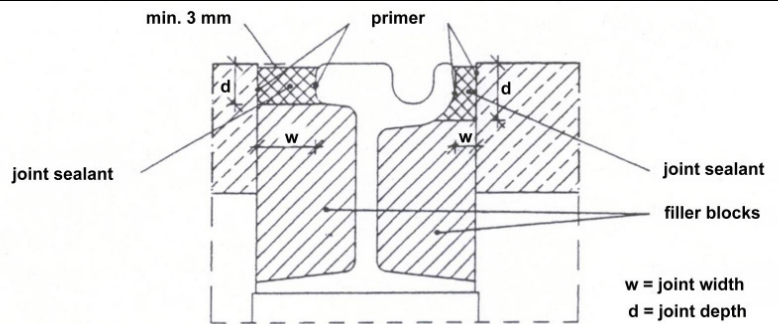
As per standard ZTV Fug-STB 01, the joint width should not exceed 60 mm and not more than 55 mm in depth. The minimum width is 15 mm, at a depth of 12 mm. The relation between width and depth of joint should remain within a proportion of 1:1 to 1:0,8.

To prevent leakage of sealant during application, bottom and arises of joint must be tight.

Top level of joint sealant should be kept at least 3 mm lower than top of rail.

To limit mechanical exposure, contact between tyres and joint sealant should be avoided.

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**Joint design:**

**Consumption:** 1,05 kg of sealant per litre of volume to be sealed

**Substrate quality:** Contact surfaces must be solid, clean, dry and free from oil, fat, loose particles and cement laitance. Steel surfaces must be free from rust (remove by blastcleaning or grinding).

**Substrate preparation:** Prime contact surfaces by brush with **Icosit KC 330 Primer** (1-pack, solvent-containing Polyurethane primer); consumption approx. 0.15 kg/m<sup>2</sup>:  
 Waiting time between priming and pouring of **Icosit KC GSC** minimum 1 hour und max. 8 hours.  
 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.  
 For more details see the respective Technical Data Sheet.

**Application details**

**Substrate temperature:** +5°C min. / +35°C max

**Ambient temperature:** +10°C min. / +35°C max.

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

**Substrate humidity:** Dry

**relative air humidity:** 70% max.

**Application methods / tools:** Mixing proportion component A : component B = 100 : 70 (p.b.w.)  
**Icosit KC GSC** is supplied in composite units, i.e. both components A+B are pre-batched in the right proportion. Stir component A first, then add component B and mix thoroughly until a homogenous consistency is achieved.  
 Observe the following points:  
 1. electric or pneumatic stirrer, approx. 600-800 r.p.m under load.  
 2. mixing time approx. 2 minutes.  
 3. make sure to properly reach walls and bottom of container.  
 For 10 kg units we recommend mixer CX 40 with stirrer WK 140 of Messrs. Collomix or mixer MXP 1000 EQ with stirrer HS 2, 140 x 160, of 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.

**Potlife:** 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** Dust-free after approx. 5 h at + 20°C

**between coats:** Serviceable after approx. 24 h at + 20 °C

<b>Notes on application:</b>	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.
<b>Value Base</b>	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.
<b>Local Restrictions</b>	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

<b>Protective measures:</b>	<p>Components A + B of Icosit KC GSC 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.</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. 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.</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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<b>Legal Notes</b>	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
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