



PRODUCT DATA SHEET

Sika® Icosit® KC 340/45 CA

2-part polyurethane grout for continuous embedded tracks with medium axle loads

PRODUCT DESCRIPTION

Sika® Icosit® KC 340/45 CA is a flexible 2-part polyurethane polymer resin grout that can be applied manually or by machine. It is designed as a vibration absorbing, load-bearing, flexible grout for fixing grooved or T-rails onto concrete slabs, steel bridge decks and tunnel invert slabs. Particularly suitable for embedded (floating) rail designs.

WHERE TO USE

Sika® Icosit® KC 340/45 CA may only be used by experienced professionals.

As a noise and vibration reducing grout for continuous embedded grooved or T-rails and road crossing applications.

CHARACTERISTICS / ADVANTAGES

- Medium axle loads and standard deflection
- Noise & vibration suppression
- More uniform load distribution into substructure
- Watertight undersealing
- Flexible, elastic
- Damping, compressible
- Good electrical insulation against stray currents
- Excellent adhesion on various substrates
- Levels out tolerances
- Suitable as a powerful, shear-resistant adhesive
- Absorbs dynamic stresses and prolongs the life of concrete substructure
- Insensitive to moisture
- Long durability, less maintenance

PRODUCT INFORMATION

CSC MasterFormat®	03 60 00 Grouting		
Composition / Manufacturing	2-part polyurethane		
Packaging		Volume	Net weight
	Part A (pail)	10.14 L (2.68 US gal.)	8.93 kg (19.69 lbs)
	Part B (can)	0.87 L (0.23 US gal.)	1.07 kg (2.36 lbs)
	A + B	11 L (2.91 US gal.)	10 kg (22 lbs)
Shelf Life	12 months from date of production		
Storage Conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +25 °C (50 °F and 77 °F). Always refer to packaging.		
Colour	Light grey		

Density	Part A	0.88 g/mL
	Part B	1.23 g/mL

SYSTEMS

System Structure	<ul style="list-style-type: none"> ▪ Sika Icosit® KC 330 Primer CA ▪ Sika® Icosit® KC 340/45 CA
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TECHNICAL INFORMATION

Shore A Hardness	55 ± 5 (after 28 days)	(ASTM D2240)
	Shore hardness assists with material identification and assessing the curing progress on site.	
Tensile Strength	1.8 MPa	(ASTM D638)
Elongation at Break	~110 %	(ASTM D638)
Electrical Resistivity	~2.85 x 10 ⁹ Ωm	
Service Temperature	<ul style="list-style-type: none"> ▪ -40 °C min. / +80 °C max. (-40 °F min. / 176 °F max.) ▪ Short term up to +150 °C (300 °F) 	
Chemical Resistance	<p>Long-term 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>Short-term or no resistance against:</p> <ul style="list-style-type: none"> ▪ Organic solvents (ester, ketone , aromates) and alcohol ▪ Concentrated acids and lyes <p>Contact Sika Canada Inc. for specific information.</p>	

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 100 : 10 (parts by weight)
Consumption	~0.9 kg per litre of volume to be sealed
Layer Thickness	Min. 15 mm Max. 60 mm
Product Temperature	Condition product parts before application preferably at +15 °C (59 °F) to assist with flow and curing speed.
Ambient Air Temperature	+5 °C min. / +35 °C max. (41 °F min. / 95 °F max.)
Relative Air Humidity	90 % max.
Substrate Temperature	+5 °C min. / +35 °C max. (41 °F min. / 95 °F max.)
Substrate Moisture Content	Dry to matt damp
Pot Life	~10 minutes at +20 °C (68 °F) After this time, the mixture becomes unuseable. Higher temperatures will shorten potlife.

Curing Time	Tack-free	~2 hours at +20 °C (68 °F)		
	Traffickable	~24 hours at +20 °C (68 °F)		
Curing Rate	Shore A	Curing Temperature		
	Curing Time	+5 °C (41 °F)	+23 °C (73 °F)	+35 °C (95 °F)
	2 h	-	~15	~20
	4 h	-	~25	~30
	7 h	~10	~30	~45
	1 day	~30	~40	~45
	3 days	~40	~50	~55
	7 days	~45	~55	~55
	14 days	~45	~55	~55
Waiting Time / Overcoating	On primer or coating at +20 °C (68 °F)			
		Minimum	Maximum	
	Sika Icosit® KC 330 Primer CA	1 hour	3 days	

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

LIMITATIONS

- To achieve the optimum flow performance, condition the material to a temperature of +15 °C (59 °F) before application.
- Undersealing layer thickness must be a 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 blast cleaning or scabbling.
- Use of appropriate Sika Primers will improve adhesion and durability.
- Do not add any solvents to product.
- Standing water must be removed before pouring.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

- Substrate must be sound, free from oil, grease, loose and friable particles or any contaminants or conditions that may affect adhesion or overall product performances.
- Concrete tensile strength ≥ 1.5 MPa.

SUBSTRATE PREPARATION

- To improve adhesion, apply Sika Icosit® KC 330 Primer CA as a primer on concrete and steel substrates.
- Always comply with the waiting time limits between application of Sika Icosit® KC 330 Primer CA and pouring of Sika® Icosit® KC 340/45 CA.
- Refer to the individual Product Data Sheets for more information.

MIXING

- Sika® Icosit® KC 340/45 CA is supplied in pre-weighed composite units consisting of parts A + B.
- Part A must be stirred thoroughly before being mixed with part B.
- Use an electric or pneumatic mixer with basket type stirrer or helical stirrer, diameter 120–140 mm, speed ~600–800 rpm.
- Mixing time ~60–80 seconds
- Ensure material is mixed from the container walls and the base by the stirrer during mixing.

APPLICATION METHOD / TOOLS

- Pour the Sika® Icosit® KC 340/45 CA into the embedded grooved or T-rails.
- Material is suitable for application with special 2-part casting machines. Correct mix ratio must be carried out. Part A must be stirred at regular intervals. Reference must be made to equipment supplier's instruction manual.

CLEAN UP

Mixing and application tools must be cleaned at regular intervals and immediately after use with Sika® Urethane Thinner and Cleaner. Hardened material can only be removed mechanically. For removal of uncured material from hands and sensitive surfaces, use Sika® Hand Cleaner towels.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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Product Data Sheet

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