

PRODUCT DATA SHEET

Sika® Igolflex®-181 GR

Elastic, polymer modified bituminous emulsion



DESCRIPTION

Sika® Igolflex®-181 GR is an elastic bituminous emulsion enhanced with polymers and special additives in a pasty form.

USES

Suitable for many different waterproofing applications:

- Foundations
- Retaining walls and drainage walls
- Floors
- Repairing works on roofs
- Collector protection, e.t.c.
- For protection and waterproofing of building constructions made of concrete, mortars, bricks, e.t.c.
- Flat and pitched roofs as vapour control layer

FEATURES

- Solvent free, user and environmentally-friendly, non flammable and odourless
- Pasty consistency
- Unaffected by weak acidic and alkaline solutions
- Highly viscous, featuring crack bridging properties
- Applicable on dry or damp substrates
- Easy application
- Economic product
- Excellent adhesion over different substrates
- Resistant to ground-root acids
- Crack bridging ability
- Non toxic

CERTIFICATES AND TEST REPORTS

 CE Marking and Declaration of Performance to EN 15814 - Polymer modified bituminous thick coatings for waterproofing

PRODUCT INFORMATION

Composition	Aqueous bitumen, fillers, special additives and emulsifiers		
Packaging	Pail Drum	18.0 kg 220.0 kg	
Colour	Black-brown		
Shelf life	12 months from the date of production		
Storage conditions	Store properly in unopened and undamaged original sealed packaging, at temperatures between +5 °C and +35 °C. Protect from frost. If the product has been stored for a prolonged time, it can be thinned with water, if required.		
Density	1.02 – 1.10 kg/lt	(ISO 2811)	

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TECHNICAL INFORMATION

Tensile strain at break	≥255 %	(ASTM D 412)
Tensile adhesion strength	1.7 N/mm²	(EN 1542)
Permeability to water vapour	S _p =51.3 m	(EN ISO 7783)
Watertightness	No penetration after 3 days at 5 bar	(DIN 1048)
Water absorption	0,07 kg/m² h	(EN 1062-3)
Softening point	>120 °C	(DIN EN 1427)
Flexibility at low temperature	Pass	(ASTM D 2939)

APPLICATION INFORMATION

Consumption	Consumption depends on the type of substrate and the characteristics of the intended use. Indicative for: • Vapour barrier: 0.60 – 0.80 kg/m² for each coat in 2 layers • Foundation waterproofing: 1.50 – 2.50 kg/m² in total for multilayer application • Vertical surfaces: Concrete or brick substructure's protection 0.60 – 0.80 kg/m² in 2 layers • Horizontal surfaces: 2.00 – 3.00 kg/m² in total for waterproofing or 3.00 – 4.00 kg/m² is required when using reinforcement These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage, e.t.c.		
Ambient air temperature	Minimum	+5 °C	
	Maximum	+35 °C	
Drying time	<24 h		(ASTM D 2939)
	Time depends on ambient temperature, substrate temperature, relative humidity and the thickness of the coating.		

BASIS OF PRODUCT DATA

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 CONSIDERATIONS

- Do not apply the Sika® Igolflex®-181 GR on surface permanently exposed to UV radiation
- Do not apply the Sika® Igolflex®-181 GR during rain
- Sika® Igolflex®-181 GR can be applied reinforced with glass fiber fabric, placed between the product's layers, mainly for horizontal surfaces
- Protect newly applied Sika® Igolflex®-181 GR from rain during the curing time
- During storage, if the product has been exposed to below zero temperatures, it must be transported to a warm area and must be left to return smoothly to normal (liquid) condition. Under no circumstances heat the product by exposing it to direct flame

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall

refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Substrate must be clean, free from dust, oil, grease, loose and friable parts. Concrete surface defects, such as voids, holes, e.t.c. must be repaired prior to application using repair mortars from Sika MonoTop® / SikaRep® / Sikadur® range of products. Removal of dirt can be performed using mechanical means or water jetting. Application surface can be dry or damp.

MIXING

Prior to application, stir Sika® Igolflex®-181 GR gently but thoroughly in order to achieve a homogeneous mixture. For mixing, an electric single paddle mixer (300 – 400 r.p.m.) with a spiral blade can be used. If Sika® Igolflex®-181 GR is applied as a primer, dilute it with 30 – 50% water. Subsequent layers must be applied diluted 20% with water.

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APPLICATION

Sika® Igolflex®-181 GR can be applied using a brush or airless spray.

Apply at least 2 layers, crosswise, with a waiting time of ~24 hours between them, the existing layer of Sika® Igolflex®-181 GR must be dry prior to the application of each following. For the first layer, it is suggested to be diluted with 30 - 50 % water. Next layers can be applied diluted with 20 % water. Sika® Igolflex®-181 GR can be reinforced using glass

fiber.

CLEANING OF EQUIPMENT

Removal of fresh remnants from tools and application equipment can be carried out using water immediately after use. Superficially cured Sika® Igolflex®-181 GR can be removed using Sika® Colma or gasoline. Fully hardened / cured material can only be mechanically removed.

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

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 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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