

PRODUCT DATA SHEET

SikaFix[®]-121 Ground Bond

POLYURETHANE FOAM INJECTION SYSTEM FOR MINING AND TUNNELING

DESCRIPTION

SikaFix[®]-121 Ground Bond is a highly reactive, solvent free, hydrophobic, 2-component, high strength polyurethane foam injection system. It is rapid setting and has a foam expansion factor of 3, making this an ideal product for rapid ground and strata stabilization. The system contains fire retardants and is self-extinguishing.

In addition to being fire resistant due to its unique silicate chemistry, the maximum exotherm reached during crosslinking is well under the maximum 150°C allowed as specified by the NSW Government Trade and Investment Mine Safety Guideline MDG 3608 August 2012, Appendix D1-TM003.

USES

- Filling and stabilising cavities in coal seams
- Filling and stabilising cavities in fractured rock eg roadways, shafts etc

- Consolidating other substrates such as sand and gravel
- Sealing gas and semi-static water

CHARACTERISTICS / ADVANTAGES

- A fast reacting polymer with strength and resiliency
- Utilises foaming agents with Zero ODP (Ozone Depleting Potential) and Zero GWP (Global Warming Potential)
- It is a two component system, with both components mixed in equal volume proportions (1:1 by volume) using a two-component injection pump coupled with a static in-line mixer.
- Foam expansion of 3 times without reaction with ground water, and up to 8 times when in contact with and mixing with water.
- Will penetrate cracks greater than 0.15 mm
- For water stopping it is recommended to use SikaFix[®]-123 AquaStop.

PRODUCT INFORMATION

Appearance / Colours	Ground Bond Part A : Opaque Liquid Ground Bond Part B : Brown Liquid
Shelf Life	12 months in store properly in unopen and undamaged original container.
Storage Conditions	Store in dry conditions within temperature range +5 °C to 35 °C. Beware from frost sensitivity for Part A.
Density	Ground Bond Part A : 1.15 g/mL (at +25 °C) Ground Bond Part B : 1.24 g/mL
Flash Point	Ground Bond Part A : > 200°C (at +25 °C) Ground Bond Part B : > 200°C
Viscosity	Ground Bond Part A : 400 cps (at +25 °C) Ground Bond Part B : 200 cps

TECHNICAL INFORMATION

Onset of foaming	~40 seconds
Foaming Stop after	~70 seconds
Foaming Expansion Factor	~3 times without water, and up to 8 times with water
Foam Density	~330 kg/m ³
Foam Stability	No shrinkage
Flexural Adhesive Strength	~4 Mpa
Border Time	~30 minutes (time to reach 1 Mpa adhesive strength)

APPLICATION INFORMATION

Mixing Ratio	Part. A : B = 1 : 1 by volume
--------------	-------------------------------

APPLICATION INSTRUCTIONS

CLEANING OF TOOLS

- For short breaks, pump only Part A through the mixer.
- For long breaks (eg storage, or after works complete) pump clean water through Part A pump / injection lines and pump clean engine oil through Part B pump / injection lines

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.

LOCAL RESTRICTIONS

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

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.

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.

PT. Sika Indonesia

Jl. Raya Cibinong-Bekasi km.20.

Cileungsi, Bogor 16820 - Indonesia

Tel. +62 21 8230025

Fax. +62 21 8230026

Website: idn.sika.com

email: sikacare@id.sika.com



PRODUCT DATA SHEET
SikaFix®-121 Ground Bond
November 2016
020707010020000023