BUILDING TRUST

PRODUCT DATA SHEET

SikaBond® R&B-100

POLYURETHANE ELASTOMERIC MATERIAL FOR THE REPAIR OF RUBBER CONVEYOR BELTS

DESCRIPTION

SikaBond® R&B-100is a polyurethane, 2-part, elastomeric, synthetic resin based material, designed for the repair of rubber conveyor belts and other industrial rubber surfaces.

USES

SikaBond® R&B-100may only be used by experienced professionals.

- Flexible repair material designed to fix non-structural damage to rubber conveyor belts in the mining and material processing industry
- Repair of natural and synthetic rubber conveyor belt covers
- An elastomeric rubber coating
- Repair of rubber pulleys and other moving parts

CHARACTERISTICS / ADVANTAGES

- High adhesion to rubber
- Good mechanical resistance
- Hardens rapidly for a fast return to service
- Easy to apply
- Good chemical resistance
- Self-levelling properties
- Good elasticity once hardened

PRODUCT INFORMATION

Composition	Polyurethane	
Packaging	Part A	750 g
	Part B	60 g
	All contents packed in a box together with:	
	SikaBond® R&B-100 Primer	~60 ml
	SikaBond® R&B-100 Cleaner	~60 ml
	Accessories: Rubber gloves, mixing paddle, application spatula, paintbrush, bag for waste.	
Colour	Black	
Shelf life	24 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 +5 °C and +30 °C. Always refer to packaging.	

Density	Part A	~1,05 kg/l	(ISO 1183-1)
	Part B	~1,02 kg/l	
	Mixed (wet)	~1,05 kg/l	
	Values at +23 °C / 50 % r.h.		

TECHNICAL INFORMATION

Shore A Hardness	**Curing Time**	**Shore A Hardness**	(ASTM D2240)
	1 hour	~55	
	48 hours	~85	
	Values at +23 °C / 50 % r.h.		
Tensile Strength	~11 N/mm² (48 h / +23 °C / 50 % r.h.)		(ASTM D412)
Elongation at Break	~400 % (48 h / +23 °C / 50 % r.h.)		(ASTM D412)
Abrasion Resistance	~234 mg (1000 cycles, 1 kg load, S35) (weight of material loss)		(ASTM D4060-90) (ISO 5470-1)
Service Temperature	-20 °C to +60 °C		
Electrical Resistivity	~4,3×10^{15} Ω·m (at 100 V)		(CQP* 079-2)
	*Sika Corporate Quality Procedure		

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 12,5 : 1 by weight		
Ambient Air Temperature	+15 °C min./+35 °C max.		
Substrate Temperature	+10 °C min./+35 °C max. Minimum 3 °C above dew point temperature.		
Curing Time	Gel time	~3 minutes	(CQP 021-1)
	Curing	~60 minutes	
	All values at +23 °C / 50 % r.h. Times are approximate and will be affected by changing ambient conditions particularly temperature.		

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Reference must be made to the Sika® Method Statement: SikaBond® R&B-100for further details.
The substrate must be clean, dry, free from oils, grease, dust, loose and friable particles.

SUBSTRATE PREPARATION

Reference must be made to the Sika® Method Statement: SikaBond® R&B-100for further details.
The substrate must be prepared to a suitable quality to ensure adequate adhesion of SikaBond® R&B-100.
The correct procedure for the required mechanical preparation of the surfaces must be established by suitably qualified personnel for the specific application.
Clean the rubber surface with SikaBond® R&B-100Cleaner. Use Sika® Primer-206 G+P on steel surfaces.
SikaBond® R&B-100Primer must be uniformly applied in a thin film to the repair area using a clean dry brush.
The primed surface must be dry to the touch before applying SikaBond® R&B-100. To confirm this, apply SikaBond® R&B-100Primer in a small test area away from the repair.
Primer drying times depend on ambient conditions and specific type of surface. As a guide: At +20 °C drying time is approximately 2 to 10 minutes. If drying times are exceeded, the priming must be repeated.
Note: Primers and activators are adhesion promoters and not an alternative to improve poor preparation / cleaning of the surface. Primers also improve the long term adhesion performance.

MIXING

Prior to mixing both parts. Shake Part A container until the liquid has been mixed. Open the container and use the supplied mixing paddle to fully mix Part A.
Add Part B to Part A container and mix Part A + B continuously for ~1,0 minute with mixing paddle. Mix thoroughly to avoid unmixed parts on the walls and bottom of the container. Always mix the contents in one direction. After mixing, a significant rise in temperature occurs in the container and the product is ready to apply.

APPLICATION METHOD / TOOLS

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
Reference must be made to the Sika® Method Statement: SikaBond® R&B-100or contact Sika Technical Services for additional information.
Pour the mixed product onto the prepared repair area and spread evenly using supplied spatula. Before surface has started to gel, provide the required surface finish.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Remover-208 / SikaBond® R&B-100Cleaner immediately after use. Hardened material can only be mechanically removed.

FURTHER INFORMATION

- Sika® Method Statement: SikaBond® R&B-100

IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika® trained applicators experienced in this type of application.

- The precise repair techniques for each application must be established by authorised and competent personnel with experience of assessing the type of damage (abrasion, cuts, perforations, etc.) extent and suitability of the product for use.
- Tests with actual substrates and under real application conditions must be performed to ensure adhesion and material compatibility.
- The work area used must be safe and secure, free of environmental contamination during the repair process, protected from direct sunlight and away from ignition sources. Adequate light and ventilation must be provided.
- Return to service will be determined by product curing and hardening. This will be dependent on ambient temperature during and after the repair.
- Do not disturb the repaired area after SikaBond® R&B-100has started to gel.
- After application, repairs must be regularly monitored for structural integrity.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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 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.

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