TECHNICAL
DATA SHEET

RASCOrail RBP320
BALLAST BONDING

POLYURETHANE BALLAST BONDING
RASCOrail RBP320 is a solvent-free, mildly hydrophobic 2-component polyurethane resin. It has been specifically developed for gravel bonding applications, such as in the switch area. The bonding of the gravel stabilizes the track bed, significantly reducing maintenance costs. Due to the localized bonding, the drainage capability of the gravel bed is maintained, allowing water to flow away.

USE
RASCOrail RBP320 is a polyurethane-based agent for bonding gravel and other loose rocks, designed for temporary track securing during rail construction work. This allows for the operational safety of the adjacent track without the need for elaborate formwork. RASCOrail RBP320 also stabilizes the subsoil in areas such as tunnels, bridge crossings, or generally weak foundations. It prevents gravel scattering and can mitigate damage to the gravel bed caused by floods and high water levels. Gravel treated with RASCOrail RBP320 simplifies cleaning procedures at railway stations and helps prevent vandalism on and around rail facilities.

FEATURES
- high ballast permeation
- minimal foaming of material in contact area with water
- high compressive strengths
- use of accelerator allows individual control of gel time
- pigmented material (black, grey) upon request

EXPERT REPORTS
- Impact on groundwater hygiene, MFPA Leipzig, Germany
- Further reports on request

swiss safety center ISO 14001 certified system

swiss safety center ISO 9001 certified system

CE

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TECHNICAL/PHYSICAL DATA

	A-Comp	B-Comp
Supplied form	liqiud	liquid
Material colour	slightly yellowish-orange	brown
Container type	IBC	IBC
Container size	990 ltr/ 1000 kg	990 ltr/ 1250 kg
Viscosity (DIN EN ISO 3219)	190 - 250 mPas	180 - 240 mPas
Density (DIN EN ISO 2811)	1,01 kg/ltr (± 0,04)	1,23 kg/ltr (± 0,04)
Hazardous goods/ADR	none	none
Application temperature	from +5 °C to +40 °C	
Storage/shelf life	6 months in original container, from +10 °C to +25 °C, in dry conditions	

	Mix (ready-to-use)
Mixing ratio	1:1 (by volume)
Pot life at 25 °C	approx. 15 min
Track-free	1,5 -2 h
Curing time	4 – 6 h
Tensile bond strength (DIN EN 12618-2)	approx. 3,7 N/mm²
Flexural tensile strength (DIN EN 196-1)	approx. 17,7 N/mm²
Tensile strength (DIN EN ISO 527-3)	approx. 44,2 N/mm²
Compressive strength (DIN EN 196-1)	approx. 62 N/mm²
Shore A-hardness	> 80

The technical details are based on laboratory values from external and/or internal laboratory tests. These details are for information purposes only. The exact product values and their tolerances (e.g. temperature fluctuations ± 2 °C) are verified and approved on the basis of the test guidelines.

SUPPLY/ADDITIVES

Item no.	Product	Container	Contents
1112.1131.002	RASCOrail RBP320 A-Comp	IBC	990 ltr / 1000 kg
1112.1132.002	RASCOrail RBP320 B-Comp	IBC	990 ltr / 1250 kg
1112.1131.001	RASCOrail RBP320 A-Comp	Kanister	19,8 ltr / 20,0 kg
1112.1132.001	RASCOrail RBP320 B-Comp	Kanister	19,8 ltr / 24,3 kg
Grouting machines, equipment and accessories available on request			

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APPLICATION/PREPARATION

The A- and B-components are supplied in the correct, ready-to-use volumetric proportions of 1:1. Application is by spraying with a wide-angle nozzle using an injection pump that delivers the components in the ratio 1:1 by volume. The components are delivered separately and mixed together by a static mixer immediately before spraying. The reaction of the mixed components produces a polyurethane system.

GENERAL GUIDELINES / SAFETY NOTICE

The reaction and curing times are temperature-dependent. Ambient and gravel temperatures significantly influence the reaction.

The individual components should have a processing temperature of at least +5 °C. Ensuring a homogeneous mixture of the individual components is essential, for which a static mixer of at least 300 mm should be used. All RASCOrail resins are sensitive to moisture. Avoid using water or water-containing substances for cleaning equipment and pumps.

Wear suitable protective clothing, gloves, a mask, and safety goggles. Keep an eye wash bottle readily available. For detailed information, please consult the safety data sheet.

DISPOSAL

For the disposal of individual components, please refer to the Material Safety Data Sheet. The fully reacted material, in moderate quantities, can be disposed of in regular household waste.

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