



TECHNICAL DATA SHEET

RASCOflex PU309L

RASCOflex PU309L (L = „langsam“ = „slow“) is a slow-reacting, solvent-free 2-component polyurethane injection resin.

USE

RASCOflex PU309L is a slow-reacting polyurethane injection resin for waterproofing and consolidation of dry to water-bearing soft ground, rock, concrete and masonry etc. Its long gel times, controlled viscosity and reaction behaviour upon contact with water make it ideal for waterproofing in case of low water flow speeds, both above water and underwater. Applications include consolidation and waterproofing of porous concrete, masonry, rock and soft ground as well as structural, waterproof filling of cracks, joints and voids.

FEATURES

- high ground permeation
- long gel time
- foaming of material limited to area of water contact, with material behind this forming compact PU mass
- resin with very high compressive strength
- use of accelerator allows fine adjustment of gel time
- Tough elastic filling of cracks, cavities and defects

APPROVALS

- EN 1504-5 System 2+: ZA.1b U(D1) W(5) (1/2/3) (5/40)
- REACh-assessed exposure scenarios: water contact, periodic inhalation, application
- REACh-tested raw materials, classed as harmless

TECHNICAL/PHYSICAL DATA

	A component	B component	A:B mix
Supplied form	liquid	liquid	
Material colour	slightly yellowish	brown	
Container type	canister	canister	
Container size	19,8 ltr/20 kg	19,8 ltr/24,3 kg	
Viscosity (DIN EN ISO 3219)	190 - 250 mPas	180 - 240 mPas	
Density (DIN EN ISO 2811)	1,01 kg/ltr (± 0,03)	1,23 kg/ltr (± 0,04)	
Hazardous goods/ADR	none	none	
Mixing ratio			1:1 (by volume)
Curing time at 25°C			approx. 50 min
Adhesion tensile strength (DIN EN 12618-2)			approx. 3,7 N/mm ²
Flexural tensile strength (DIN EN 196-1)			approx. 17,7 N/mm ²
Tensile strength (DIN EN ISO 527-3)			approx. 44,2 N/mm ²
Compressive strength (DIN EN 196-1)			approx. 62 N/mm ²
Application temperature	from +5° C to +40° C		
Storage/shelf life	12 months in original container, from +10° C to +25° C, in dry conditions		



APPLICATION

The A and B components are supplied in the correct, ready-to-use volumetric proportions. Grouting is performed using an injection pump. The components are separately fed, in the ratio 1:1 by volume, to a static mixer located immediately upstream of the injection point. The mixed components react to form a solid polyurethane resin mass.

GENERAL GUIDELINE

The gel and curing times are temperature-dependent. The reaction between the components is significantly influenced by the ambient, material, ground and groundwater temperatures. A minimum application temperature of +5°C should be observed for the individual components. The components shall be properly blended into a homogeneous mix. For this purpose, a static mixer of min. 300 mm length should be used. As all RASCOflex PU resins are moisture-sensitive, always ensure that the containers are properly sealed during storage. As the B component is identical for the various RASCOflex PU309 systems, it does not need to be exchanged when switching systems. Do not use water or aqueous agents to clean the equipment and pumps.

SAFETY NOTICE

Suitable protective clothing, gloves and goggles shall be worn. An eyewash bottle shall be kept at hand. For further details, please consult safety data sheet.

EXPERT REPORTS

- Impact on groundwater hygiene, Institute of Environmental Hygiene and Environmental Medicine, Gelsenkirchen, Germany
- Compatibility with polymers to DIN EN 12637-3, MFPA Leipzig, Germany
- Flexural tensile and compressive strength, University of Duisburg-Essen, Germany
- Test based on „German Federal Guideline for Hygienic Assessment of Organic Materials in Contact with Drinking Water“
- further reports on request

SUPPLY/ADDITIVE

Item no.	Product	Container	Contents
1101.6311.001	RASCOflex PU309L A-Comp	canister	19,8 ltr
1101.6391.001	RASCOflex PU309 B-Comp	canister	19,8 ltr
1101.6911.001	RASCOflex PU-AC	canister	4,8 ltr
1101.6921.001	RASCOflex PU-THIX	canister	4,9 ltr
1101.6931.001	RASCOflex PU-FO	canister	4,9 ltr

Grouting machines, equipment and accessories available on request

LEGAL NOTICE: The information provided on the use and application of our products in this technical data sheet is based on the present state of our knowledge. The customer shall bear sole responsibility for the proper specification, application and use of the products in line with the intended purpose, project-specific conditions and external actions. The most recent technical data sheet shall apply. The current technical data sheets are available at www.rascor.com. Our General Terms of Business shall form an integral part of this technical data sheet.

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