

RASCOflex US409

UREA-SILICATE INJECTION MATERIAL

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UREA-SILICATE INJECTION PRODUCTS

RASCOflex US urea-silicate resins are reactive, solvent-free, two-component resin systems based on modified water glass and isocyanate. Both the compactly cured, bubble-free version and the foamed form exhibit high adhesive strength. The curing behavior remains unchanged during injection in both dry and wet environments. Nevertheless, the injected resin can be mechanically processed well. Due to the relatively high water glass content, silicate resins have excellent properties in fire behavior and against chemical influences, especially in comparison to polyurethane systems.

USE

RASCOflex US409 is a compact curing 2-component injection resin for reinforcing cracked components in wet to dry environments. Thanks to its bubble-free curing, even in contact with water, RASCOflex US409 can also be successfully injected under water. Thanks to its viscoplastic properties, the injection resin is also suitable for grouting roadway slabs on freeways, airport runways, etc.

FEATURES

- no foaming or increase in volume upon contact with water
- low viscosity
- fast-reacting, high compressive strength
- also suitable for underwater application
- high adhesion to joint/crack/void faces, even on wet base
- non-flammable

EXPERT REPORTS

- Impact on groundwater hygiene, Institute of Environmental Hygiene and Environmental Medicine, Gelsenkirchen, Germany

APPROVALS

- REACh-assessed exposure scenarios: water contact, periodic inhalation, application
- REACh-tested raw materials, classed as harmless



Further product info



EN 102.10.2024

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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RASCOflex US409

ACRYLATE INJECTION MATERIAL

TECHNICAL / PHYSICAL DATEN

	A-Component	B-Component
Supplied form	liquid	liquid
Material colour	colourless	dark brown
Container type	canister	canister
Container size	20,0 ltr/29,3 kg	20,0 ltr/22,9 kg
Viscosity at 23 °C (DIN EN ISO 2555)	150 - 250 mPas	150 - 250 mPas
Density (DIN EN ISO 2811)	1,46 kg/ltr (± 0,04)	1,15 kg/ltr (± 0,04)
Hazardous goods/ADR	none	none

*Filling is controlled by weight balance. Volume details are indicative only and vary with temperature fluctuations.

A:B Mix

Mixing ratio	1:1 (by volume)
Viscosity at 23 °C (DIN EN ISO 2555)	400 - 700 mPas
Curing time at 23 °C	2 min as standard, can be set to 15 min ex works on request
Application temperature	from +4 °C to +40 °C
Storage/shelf life	12 months in original container, from +5 °C to +30 °C, in dry conditions

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

SUPPLY/ADDITIVES

Item no.	Product	Container	Contents
1101.7111.005	RASCOflex US409 A-Comp	canister	20,0 l/29,3 kg
1101.7112.005	RASCOflex US409 B-Comp	canister	20,0 l/22,9 kg

Grouting machines, equipment and accessories available on request

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RASCOflex AY408

ACRYLATE INJECTION MATERIAL

APPLICATION/PREPARATION

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 silicate resin. The A component freezes at sub-zero temperatures.

GENERAL GUIDELINES / SAFETY NOTICE

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 +15° 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 shall be used.

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

CLEANING OF WORKING EQUIPMENT

During the period of application, the working equipment (pump, mixer unit, packers etc.) can be simply cleaned with water. Cured material can be removed mechanically, e.g. with a wire brush.

DISPOSAL

Consult the material safety data sheet for disposal of the individual components. The reacted material can be disposed of with regular household waste in moderate amounts.



Mixing video