

# RASCOflex GT781

## POLYURETHANE INJECTION MATERIAL

### POLYURETHANE INJECTION PRODUCTS

RASCOflex polyurethane products are divided into three categories: classic SPUR foams, flexible two-component systems, and tough-elastic two-component systems. For SPUR foams, water contact acts as the primary initiator, making them particularly suitable for temporary applications. In contrast, the actual polyaddition process of two-component systems, which results in a solid and durable material structure, is triggered by combining both components. RASCOflex GT781 is a two-component, controlled-foaming, hydrophobic polyurethane based on MDI. Its formulation limits the foam expansion factor to 300%. The base of RASCOflex GT781 is a tough-elastic polyurethane with strengths of up to 60 N/mm<sup>2</sup> in its non-foamed state. Consequently, the triple-foamed RASCOflex GT781 achieves very high strength combined with low density. Thanks to the thick wall structure within its pore system, the foam body remains stable over time and does not collapse like conventional SPUR materials.

### USE

RASCOflex GT781 is used as a two-component polyurethane injection foam for stabilization of foundation, strata, soil consolidation, raising sunken slabs and pavements, void filling, consolidation of fractured rock and coal (penetrates cracks > 0.15 mm) and underpinning.

### FEATURES

- rigid foam of controlled foaming rate between 2.5 and 3.0
- resistance to wide range of chemicals
- environmentally safe
- no modification of product is needed

### EXPERT REPORTS

- Impact on groundwater hygiene in accordance with DIBt (German Institute for Construction Technology) guidance paper, IMFPA Leipzig



Further product info



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](http://www.rascor.com). Our General Terms of Business shall form an integral part of this technical data sheet.

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## TECHNICAL/PHYSICAL DATA

	A-Comp	B-Comp	Mix A:B
Supplied form	liquid	liquid	
Material colour	clear to yellowish	brown	brownish
Container type	metal canister	metal canister	
Container size *	19,8 ltr/20 kg	19,8 ltr/24,3 kg	
Viscosity at 23 °C	370 - 470 mPas	200 - 300 mPas	300 - 400 mPas
Density at 23 °C	1,01 kg/ltr (± 0,04)	1,23 kg/ltr (± 0,04)	
Flash point	> 180 °C	> 100 °C	>180 °C
Hazardous goods/ADR	none	none	
Mixing ratio			1:1 (A:B)
Pressure-free expansion			3-fold
Foaming start at 23 °C			45s (±10s)
Foaming end at 23 °C			70s (±10s)
Application temperature			from 5 °C to 40 °C
Storage/shelf life	12 months in original container, from +10 °C to +30 °C, in dry conditions		

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

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
1111.7811.001	RASCOflex GT781 A-Comp	canister	19,8 ltr
1111.7812.001	RASCOflex GT781 B-Comp	canister	19,8 ltr
1111.1101.001	RASCOflex GT-AC PU	canister	4,8 ltr
1111.1105.001	RASCOflex GT-THIX PU	canister	4,9 ltr
1111.1108.001	RASCOflex GT-FO PU	canister	4,9 ltr

Grouting machines, equipment and accessories available on request



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## APPLICATION/PREPARATION

Due to the fast reaction time, a two-component injection pump (volumetric 1:1) must be used for injection. For homogeneous mixing of the A- and B-Comp, a static mixer of at least 300 mm should be used. The moisture from the strata will cause the foaming reaction with only limited expansion due to hydrophobicity of the liquid material. The reaction time depends on the temperature either in the soil or the product itself. Please keep in mind that in any temperature condition CO<sub>2</sub> liberation causing pressure caused by expansion of polyurethane!

Material has to be conditioned to appropriate temperatures for at least 12 hours prior to application. Caution: Circulating RASCOflex GT781 Component A through the pump and pipe on the A side after injection is advisable. Component A can stay in pump for many days. Component A can be used for flushing mixing head or static mixer after injection.



## GENERAL GUIDELINES / SAFETY NOTICE

RASCOflex GT781 is non-hazardous in its cured condition. Always use protective clothing, safety goggles and gloves. Avoid contact with eyes and skin. Do not breathe vapours. If contamination occurs rinse thoroughly irritated skin and eyes with water and consult with doctor. When handling do not eat, smoke and work with open fire. Handle in accordance with good occupational hygiene and safety practices.

Not reacted mixture should not be disposed of except to special sites. It is advised to let the product react with water to form foam and afterwards dispose on landfill.

## CLEANING OF WORKING EQUIPMENT

The pump and line of Component B must be thoroughly cleaned with GG-PUR Cleaner and preserved with flushing oil through pumping it through the pump. Curing process might take place with residual product left in the pump and injection line with the air humidity.

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