

# RASCOflex AY408

## ACRYLATE INJECTION MATERIAL

### ACRYLATE INJECTION PRODUCTS

RASCOflex acrylates have been in use since the mid-1960s. For RASCOR, environmental protection has always been a crucial concern. That is why RASCOR has always striven to use the most eco-friendly raw materials and production methods in manufacturing the RASCOflex acrylates. We make every effort to maximize eco-efficiency and not simply to meet the requirements specified in standards. No solvent-bearing products are used or needed either for the products or for the manufacturing process or for cleaning the injection equipment.

RASCOflex products are subject to strict, regular internal quality controls and are also continuously inspected by external laboratories.

### USE

RASCOflex AY408 is a high-quality standard product, in use for decades. Though suitable for many waterproofing applications, it is primarily used for mass injection involving large volumes of material, e.g. to grout segment joints in tunnels, to fill voids, for grout curtains and for consolidating injections behind buried structures.

RASCOflex AY408 is a good all-rounder. Neither high hydrostatic pressures nor temporary dry periods reduce the quality or service life of RASCOflex AY408.

The modular system with its various additives allows the site team to tailor RASCOflex AY408 at any time to the demands of the particular situation. It can thus be adjusted so as to produce a very heavily swelling grout body, to strengthen adhesion or to reduce shrinkage. RASCOR's technical consulting team will be glad to assist you in making the best choice.

### FEATURES

- suitable for damp or wet environment
- can be used for wide, damp to heavily water-bearing cracks and segment joints
- reactive and reversible swelling action
- sealing achieved by swelling pressure on contact with water
- no adhesion required to joint/crack faces (injection possible even in case of partial soiling)
- high frost resistance (in its end condition)
- maximum cost-effectiveness
- free from PFAS, PFOS and PFOA

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Further product info



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## TECHNICAL/PHYSICAL DATA

	A-Comp Base component	A-Cat Activator	B-P Hardener powder
Supplied form	liquid	liquid	powder
Material colour	green	transparent	white
Container type	canister (plastic)	bottle (plastic)	pot (plastic)
Lid colour	black	black	black
Standard container size 50 ltr set *	23.7 ltr / 25.3 kg	1.3 ltr / 1.45 kg	500 g
Density (DIN EN ISO 2811)	1.07 kg/ltr (± 0.03)	1.12 kg/ltr (± 0.03)	
Hazardous goods/ADR	none	none	UN 1444

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

### Mix (ready-to-use, incl. water component)

Dynamic viscosity at 23 °C (DIN EN ISO 3219)	2 - 4 mPas (EMPA)
Apparent viscosity at 23 °C (DIN EN ISO 2555)	8 - 12 mPas
Compressive strength (DIN EN 12190)	n/a
Swelling capacity	approx. 15 % (after 72 h)
pH value of cured mix	approx. 7.0 to 12.0 after reaction with alkalinity of concrete
Start of polymerization at 20 °C	approx. 60 - 120 s
Application temperature	from +0 °C to +60 °C (down to -5 °C in ice-free cracks and joints)
Storage/shelf life	12 months in original container at +5 °C to +25 °C, in dry conditions
Water is a component of the mix (for exact details of dosage, see section "Application/preparation")	

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.

### APPROVALS

- EN 1504-5 System 2+
- National Technical Approval issued by DIBt for grout curtains
- certified class B2 (normal-flammability) reaction to fire to DIN 4102-1
- suitable for grout curtains to DB (German Federal Railways) Guideline no. 804.61.02
- REACH-assessed exposure scenarios: water contact, periodic inhalation, application
- REACH-tested raw materials, classed as harmless

### EXPERT REPORTS

- Impact on groundwater hygiene, MFPA Leipzig, Germany
- Determination of characteristic values to EN 1504-5, MFPA Leipzig, Germany
- Fire test, B2 (normal-flammability) reaction to fire to DIN 4102-1, MFPA Leipzig, Germany
- Compatibility with polymers, MFPA Leipzig, Germany
- Model environmental product declaration available
- Further reports on request

## SUPPLY/ADDITIVES

Item no.	Product	Container	Contents
1401.2444.001	RASCOflex AY408 50 ltr	set	50 ltr
Further delivery sizes available on request			
1101.3011.001	RASCOflex AY-RE (Retarder)	canister	5 ltr
1101.3022.001	RASCOflex AY-AC (Accelerator)	canister	10 ltr
1101.3041.001	RASCOflex AY-PE (Elastomer)	canister	25 ltr
1101.3052.001	RASCOflex AY-QV100 (Swell Enhancer)	canister	20 ltr
1101.3030.001	RASCOflex AY-DT A-Comp (Rinsing Fluid)	canister	10 ltr
1101.3031.001	RASCOflex AY-DT B-Comp (Rinsing Fluid)	canister	10 ltr

Grouting machines, equipment and accessories available on request

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## APPLICATION/PREPARATION

RASCOflex AY408 is supplied in exactly proportioned quantities such that one container of each product is used for the mix. Partial quantities should be avoided. The material is injected using a 2-component injection pump with the components fed in the ratio 1:1 by volume (e.g. grouting machines: RASCO pump models HJP 14, HJP 18, HJP 25, HJP 50). Pumps used for acrylates must be made from stainless steel!

The **A-component is prepared** by mixing the catalyst A-Cat with the concentrate A-Comp. A mixing paddle must be used for mixing. The ready-mixed A-component may be kept for approx. 2 days, depending on the storage temperature.

The **B-component is prepared** by mixing the powder B-P with water to produce a total quantity of 25 ltr (do not use the A-component mixing paddle to mix the B-component!) The ready-mixed B-component may be kept for 2 to 5 days, depending on the storage temperature.

The prepared A- and B-components are mixed together later in the mixing head during the pumping operation. A static mixer is not required.

RASCOR offers a wide range of packer solutions, including screw packers, lamella packers, nail packers and one-day packers, made from different material types, with various diameters and lengths, and different coupling systems.

## MODIFICATION / ADJUSTMENT OF PRODUCT PROPERTIES

Additives can be used at any time, also directly on site, to tailor RASCOflex AY408 to the demands of the particular situation.

Gel time acceleration: RASCOflex AY-AC  
Gel time retardation: RASCOflex AY-RE  
Polymer strengthening: RASCOflex AY-PE  
Swell enhancement: RASCOflex AY-QV100

To ensure correct dosage of the specific additive, please consult the relevant technical data sheet!

## GENERAL GUIDELINES / SAFETY NOTICE

The use of different containers and mixing implements for the A- and B-components is essential. RASCOflex AY-RE Retarder and RASCOflex AY-AC Accelerator may only be added to the A-component. The use of RASCOflex AY-DT is recommended for cleaning the grouting equipment. No additional rinsing pump is needed for this.

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

For details on how to dispose of the individual components, please consult the product safety data sheet. Cured material, in moderate quantities, may be disposed of with normal domestic waste.

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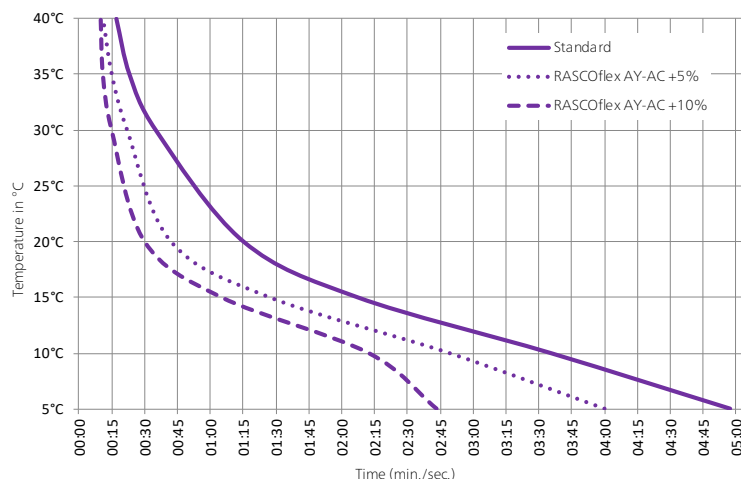
Mixing video

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## GEL TIME

Gel time in minutes, in function of material/building fabric temperature

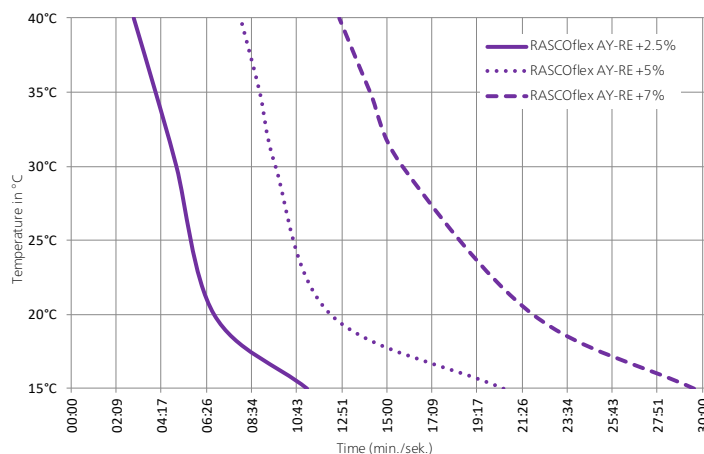


Temp.	Standard	AY-AC +5%	AY-AC +10%
40 °C	17 s	11 s	10 s
35 °C	25 s	15 s	11 s
30 °C	35 s	24 s	17 s
20 °C	75 s	42 s	30 s
15 °C	120 s	87 s	65 s
10 °C	210 s	170 s	130 s
5 °C	5 min	4 min	160 s

Guide values from laboratory tests!

## RETARDATION TIME

Gel time in minutes, in function of material/building fabric temperature



Temp.	AY-RE +2.5%	AY-RE +5%	AY-RE +7%
40 °C	180 s	8 min	12 min
35 °C	5 min	9 min	14 min
30 °C	6 min	10 min	16 min
20 °C	7 min	12 min	22 min
15 °C	11 min	20 min	30 min

Guide values from laboratory tests!

**NOTE:** Any further increase, beyond the stated values, in the quantities added is not recommended and may impair waterproofing performance.

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