

# 4/1: WestCHEM Grouting Systems

**SOLVA  
STRONG**<sup>®</sup>  
RANGE OF  
CONSTRUCTION CHEMICALS



## POLYACRYLATE INJECTION GROUT

Product:

10  
Kg



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## POLYACRYLATE INJECTION GROUT

### About Product

**SolvaStrong Polyacrylate Injection Grout** is a very low viscous, solvent free, elastic polyacrylic injection system which cures to form a flexible water swellable resin. On contact with moisture the cured resin swells reversibly by 100% of its volume to effectively and permanently seal against ingress of water.

#### Areas of Application:

- SolvaStrong Polyacrylate Injection Grout is recommended for sealing cracks, Joints, and crevices in concrete, rock and brick masonry to prevent water ingress.
- Waterproofing for underground structures (Basements, Subway, Tunnel etc).
- Seal water-bearing construction joints, cracks and voids in rocks, concrete and brickwork.
- Creating water sealing walls curtains in damp or water saturated ground conditions, situated near the building component or within the building structure.
- Used as a post-construction, external injection sealing system for construction and limited movement expansion or drainage pipe joints.
- Used for the repair by injection of damaged waterproofing membranes.

#### Features:

- 1: Adjustable reaction time between 10 and 60 minutes.
- 2: Moist cured resin is elastic, can absorb limited movements and prevent water ingress.
- 3: Cured SolvaStrong Polyacrylate Injection Grout is a reswellable material and can swell innumerable number of times and is not affected by the cycle of swelling and shrinking. It swells to about 100%.
- 4: Very low viscosity material almost like water thus reaches everywhere water reaches and gels to for a resin preventing water ingress.
- 5: Solvent free acrylic resin system which does not give any gases or foam during reaction.

- 6: SolvaStrong Polyacrylate Injection Grout has good reaction even in presence of moisture in the structure and seals the fine cracks.
- 7: High pH-value of 9 to 10.
- 8: Cured SolvaStrong Polyacrylate Injection Grout is insoluble in water and hydrocarbons and resistant to acids and alkalis.

### Technical Specification

#### Physical Data:

#### Colours:

- Component(A1) Resin: Transparent (Pale Yellow)
- Component(A2) Accelerator: Transparent (Lemon Yellow)
- Component(B1) Hardener: White crystals Density
- Component(A1) Resin: ~ 1.10 kg/l
- Component(A2) Accelerator: ~ 1.10 kg/l
- Component(B1) Hardener: ~ 2.4 g/cm<sup>3</sup>

#### Viscosity:

- Of Mixture: ~ 3.11 CP (at +25°C)

#### Packaging:

- Component(A1) Resin: 8 kg
- Component(A2) Accelerator: 1 kg
- Component(B1) Hardener: 2 x 40 g

### Application Method

#### 1: Making Component B Liquid (Hardener):

The contents of 1 bag of the hardener powder is dissolved in 5 litres of water. The hardener solution is stirred thoroughly until the hardener powder is completely dissolved. This liquid is kept separately and not mixed until grouting is started.

**Note:** 4 packs of Hardener powder is given to prevent wastage as pre-diluted water loses its efficacy over time.

**2: Fixing Reaction time:** Based on the existing ambient temperature and the speed of reaction needed decide the



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quantity of Accelerator(A2) required from the enclosed chart. (Kindly note there may be slight variation in the actual material temperature so it is recommended to have a test done prior to beginning grouting to confirm target time for reaction) The necessary quantity of Accelerator(A2) as finalised is diluted with water to a total quantity of 1 litres. The 1 litres of Accelerator solution is mixed with 4 kg of Component(A1) and thoroughly mixed. This liquid is kept separately and not mixed until grouting is started.

**3: Grouting:** The injection Resin and Hardener can be used in either the single component pump or the two component pump with stainless steel injection system.

**a)** In Single component pump, partial amounts of the premixed components are filled in a ratio of 1: 1 into a mixing container and mechanically mixed before grouting. The mixed material should be grouted before time fixed for reaction. While using single component pump it is important to clean the pump with water everytime a break is being taken or it seems that pressure is dropping.

**b)** In Two component pump, fill the premixed components into the two separate storage containers of the pump. The pump is set to work at a ratio of 1:1 by volume and the grouting can be carried out.

#### **Cleaning:**

Clean all tools and application equipment with water immediately after use. Hardened/cured material can only be removed mechanically after softening it with thinner.

#### **Storage Conditions / Shelf-Life:**

SolvaStrong Polyacrylate Injection Grout can be stored for a period of 12 months from date of manufacturing, if stored in unopened, undamaged and original sealed packaging, in dry and lightproof conditions at temperatures between +10°C and +30°C.

#### **Health & Safety Information:**

For the health and safety information and how to safely handle and use this product, please make sure that you obtain a copy of the Material Safety Data Sheet (MSDS) from our office.

#### **Chart to fix reaction time:**

Quantity of Accelerator to be mixed in water					
ml Accelerator	Ambient Temperature				
Reaction Time	5°C	10°C	20°C	30°C	40°C
10 min		940	575	240	140
20 min	530	450	140	70	30
30 min	310	175	80	40	
40 min	180	125	40		
50 min	125	100	37		

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