

# **ACTFLEX INJECTSWELL**

**TECHNICAL DATA SHEET** 

Hydrophillic Flexible Polyurethane Grout

22/12/2022

# **DESCRIPTION**

ACTFLEX INJECTSWELL is a single component hydrophilic polyurethane in combination with polyether polyols, ACTFLEX INJECTSWELL is a low-viscosity, single component hydrophilic polyurethane grout offering excellent penetration properties, superior strength and durability. It reacts and swells when it comes in-contact with water and forms a flexible polyurethane seal. After injection has occurred, The ability of ACTFLEX INJECTSWELL is to swell and increase in volume due to water absorption is one of the important features that differentiate hydrophilic grouts from their hydrophobic counterparts

INJECTION GRADE

**COLOUR** 

**PACKAGING** (weight)

Light Brown

• 10kg

# ACTFLEX INJECTSWELL IS SUITABLE FOR THE FOLLOWING APPLICATIONS:

ACTFLEX INJECTSWELL is a hydrophilic polyurethane prepolymer liquid for hydrophilic polymer resin type water stopping.

It can be injected directly into a leaking crack, fracture or joint, or it can be injected 1:1 with water.

After injection has taken place, the ACTFLEX INJECTSWELL will foam to expand and fill the void, forming a tight, impermeable elastomeric seal, stopping the water flow.

Do not apply onto substrates with surface temperatures under 10°C.

# **ADVANTAGES**

- · Potable water approved
- · High tensile adhesion.
- · Solvent-free, environmentally safe.
- Excellent adhesion to most surfaces including concrete, brick and mortar.
- · Resistant to most organic solvents, mild acids and alkalis.
- Rapidly forms a highly resilient flexible seal that allows movement to the crack, fracture or ioint.
- · Reacts even with seawater or mineral water

#### **GUIDELINES**

Single component pump: The product may also be applied with single component injection equipment. The presence of sufficient water in the substrate is necessary for the product to form a gel. It may be advisable to introduce water prior to injection. In areas of very little water content and little counter pressure the product may expand to a foam.



# **ACTFLEX INJECTSWELL PROPERTIES**

Colour	Light Brown	Density @ 25%	1.1
Solids Contents	90%	<b>Bond Strength</b>	> 0.28 MPa
<b>Elongation Thick Sections</b>	>34%	<b>Application Temperature</b>	>10°C
Elongation Thin Sections	>400%	Viscosity @ 25%	450-600 MPa's

# **TECHNICAL DATA**

Ratio * (Between Water:Resin @ 25°C)	Cream Time	Rise Time	Free Rise Ratio
1:1	48 Sec	343 Sec	4.3X
1:2	48 Sec	338 Sec	5.3X
1:3	48 Sec	324 Sec	5.8X
1:4	48 Sec	302 Sec	6.4X
Temp (Ratio 1:1 Water:Resin)	Cream Time	Rise Time	Free Rise Ratio
Temp (Ratio 1:1 Water:Resin) 10°C	Cream Time 80 Sec	Rise Time 180 Sec	Free Rise Ratio 4X
10°C	80 Sec	180 Sec	4X

# **APPLICATION INSTRUCTIONS**

ACTFLEX INJECTSWELL can be injected by two methods:

- 1. Single component pump that is equipped for high pressure. The resin will react with the water in the structure and foam.
- 2. Twin piston pump water / resin ratio can be varied to form different density foams as tabled above shows.

Note: It is recommended that the material be conditioned to appropriate temperatures for at least 12 hours prior to application. Always make sure that the material is homogenous, mix the resin using a dry clean drill and paddle mixer for a minimum of 15 sec before application. At temperatures below 10°C crystallisation may occur. However after heating (indirect heat) and mixing, the liquid is restored to its original form.

# **PACKAGING & STORAGE**

ACTFLEX INJECTSWELL should be stored at room temperature (min 10°C and max 38°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of one year can be expected.

9 months in the original unopened containers stored in cool, dry conditions 10-22°C. Protect the material against moisture and direct sunlight. Storage above this temperature may reduce storage life. Uncured product is combustible so keep all sources of ignition away from product and its vapours and DO NOT store in pits, depressions, basements or areas where vapours may be trapped. ACTFLEX INJECTSWELL is sensitive to airborne moisture. It is preferable to use all contents of the container after opening.

