CAC®-PUF 1X

Semi flexible Polyurethane grout

CAC®-PUF 1X It is hydrophilic polyurethane based on MDI in combination with polyether polyols and an amine based catalyst. The system only reacts when come in contact with water and produce permanent, impermeable, semiflexible polyurethane foam.

AREA OF APPLICATION:

- Sealing of water ingress
- Sealing of leaking cracks and joints
- Sealing of water in masonry, brickwork
- Void filling
- Back grouting

Primary uses to obtain-

- Solvent free, environmentally safe.
- Foams upon contact with water
- Reacts in moist and wet surroundings
- Can withstand high hydrostatic pressures
- Variable reaction times
- Medium viscosity
- Good bonding to wet surfaces

METHOD OF APPLICATION:

Wet/flowing water condition

Adding & mixing accelerator up to 10% depending on required reaction time inject this mixture through a single component injection pump. Moisture/water from the ground or structure creates foaming and curing reaction.

Dry Condition

For injection purposes, flush holes with water to thoroughly wet the injection area. Inject Material with accelerator through a single component injection pump.

After injection, pump must be thoroughly cleaned by PU cleaner. Always mix the resin using a dry clean drill before application. The material should be conditioned to appropriate temperature for at least 12 hrs. prior to application. Containers must be sealed when not in use. Otherwise moisture may be absorbed from the atmosphere causing it to react. Care should be taken during application that below 10^0C there may be a possibility of crystallization.

TECHNICAL PROPERTIES :

CAC®-PUF 1X	
Appearance	Brown liquid
Density @25°C	1.15 ± 0.020
Flash point	>180^0C
Viscosity @25^0C, Brookfield DVII spindle no. 2 at 60 r.p.m.	350 -450 Mpas
CAC®-PUF 1X Catalyst	
Appearance	Clear liquid
Density @25°C	1.01 ± 0.020
Flash point	>130 °C
Viscosity @25^0C, Brookfield DVII spindle no. 2 at 60 r.p.m.	30 -40 Mpas

The reaction time depends on the temperature of the product and the ground. Site trials should therefore be performed in advance.

Testing of **CAC®-PUF 1X** – All tests carried out using the following mix ratio.

Injection Resin: 10 parts by weight

Accelerator: As a percentage of part A by weight

Water: 1 parts by weight

Cream time				
catalyst	1%	2%	5%	10%
15^{0}C	35 sec	30 sec	25 sec	22 sec
25^{0}C	28 sec	25 sec	20 sec	17 sec
Rise time				
catalyst	1%	2%	5%	10%
15^{0}C	12 min 50 sec	8min 50 sec	3 min 25 sec	2 min 20 sec
25^{0}C	11 min 35 sec	7 min 10 sec	2 min 45 sec	1 min 40 sec.
Foaming ratio				
catalyst	1%	2%	5%	10%
15^{0}C	>5X	>10X	>20X	>24X
25^{0}C	>8X	>15X	>25X	>30X

The above data are based on tests carried out under laboratory condition.

PACKAGING :

Packing of resin component in a 20 lit. Container and accelerator in a 2 lit. bottle. Other packing size can be made available as per requirement.

STORAGE :

Material must be stored in airtight containers at room temperature (10°C to 38°C), kept in a cool and dry place. If these conditions are maintained and the product packaging is unopened, then a shelf life of one year can be expected. The product must be prevented from freezing.

SAFETY PRECAUTIONS :

Material is non hazardous. However, follow standard safety procedures when handling the product .Wear gloves and face / eye protection. Avoid eye and skin contact. If skin contact occurs, wash with plenty of water and soap. In case of eye contact rinse with plenty of water and seek medical advice. For further information refer to Material Safety Data Sheet. The Health & Safety data sheet is available upon request from local CAC representative.