

Water Stopping Polyurethane Grout

DESCRIPTION

TamPur 100 is a single-shot hydrophobic polyurethane based on MDI in combination with polyether polyols and an amine based catalyst. The system only reacts when it comes into contact with water, producing a rigid polyurethane foam.



KEY BENEFITS

- > Variable reaction time
- > High expansion ratio
- > Low viscosity
- > Reacts with saline and mineral water
- > Solvent free, environmentally safe (phthalate free)
- > Chemically resistant

TYPICAL APPLICATIONS

- > Tunnels
- > Water retaining structures
- > Below grade construction
- > Pipe joints
- > Water treatment plants
- > Soils

TECHNICAL DATA

TamPur 100	
Appearance	Brown liquid
Viscosity at 25°C (Brookfield DV II spindle no. 2 at 60 rpm)	150 - 200 mPa·s
Flash point	> 150 °C
Density at 25°C	1.18 g/cm ³

TamKat 100	
Appearance	Light yellow Liquid
Viscosity at 25°C (Brookfield DV II spindle no. 2 at 60 rpm)	50 mPa·s
Flash point	> 115 °C
Density at 25°C	1.10 g/cm ³

Testing TamPur 100 - All tests carried out using the following mix ratio.

TamPur 100: 100 parts by weight.

TamKat 100: As a percentage of TamPur 100 by weight, as stated in the results. Less than 5% TamKat is not recommended.

Water: In all tests, 10 parts by weight.

Cream Time		
TamKat	5%	10%
10°C	33 sec	15 sec
15°C	26 sec	14 sec
25°C	16 sec	10 sec
35°C	14 sec	9 sec
Rise Time		
TamKat	5%	10%
10°C	2 min 24 sec	78 sec
15°C	2 min 17 sec	71 sec
25°C	2 min 14 sec	60 sec
35°C	2 min 4 sec	54 sec
Expansion Rate		
TamKat	5%	10%
10°C	> 10X	> 42X
15°C	> 20X	> 48X
25°C	> 22X	> 50X
35°C	> 26X	> 56X

Keep containers sealed whilst not being used. Moisture may be absorbed into the TamPur 100 from the atmosphere causing it to react.

Careful consideration should be given to applications below 10°C on a falling thermometer to avoid possible crystallisation.

All technical data stated herein is based on tests carried out under laboratory conditions.

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APPLICATION GUIDELINES

TamPur 100 is a complete system for water cut even when strong leaks are encountered. Adaptable reaction time is possible by varying the catalyst ratio from 5% to 10%.

Reaction with the water results in the formation of a high expansive rigid polyurethane foam, which is hydrophobic and chemically resistant. On certain injections it is advisable to give a second pass using TamPur 150 / TamPur 170 / TamPur 190 to provide a flexible seal.

The reaction time can be adjusted from 3 minutes to 50 seconds. See table of reaction times on previous page.

Depending on the velocity of the running water or the amount of water expected in a crack, the reaction time should be fixed before injection.

Mix the resin using a dry clean drill and paddle mixer for a minimum of 15 sec before application.

The pre-mixed resin can be pumped by means of a single component injection pump that is equipped for high pressure and low volume (HP1 Pump) or for large water leaks with high volume and low pressure (HP2 Pump).

Note: Always make sure that the material is homogeneous. Shake well before use.

RELATED PRODUCTS & EQUIPMENT

TamPur Cleaner
TamPur Ecoclean

YIELD

1 kg = 0.91 litres

STORAGE

TamPur 100 / TamKat 100 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.

HEALTH & SAFETY

TamPur 100 / TamKat 100 should only be used as directed. We always recommend that the Safety Data Sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety Data Sheet is available upon request from your local Normet representative.