

▶ 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

- Potable water certified
- Variable reaction time
- High expansion ratio
- Reacts with saline and mineral water
- Solvent free, environmentally safe.
- Good chemical resistance
- Resistant against biological attack

▶ Typical Applications

- Sealing high water flow
- Rapid sealing of leaking cracks or joints
- Void filling
- Back grouting
- Soil stabilization

▶ Technical Data

TamPur 100	
Appearance	Brown liquid
Viscosity at 25°C (Brookfield DV II spindle no. 2 at 60 rpm)	120 - 220cps
Flash point	> 180°C
Density at 25°C	6.6N/mm ²
TamKat 100	
Appearance	Clear liquid
Viscosity at 25°C (Brookfield DV II spindle no. 2 at 60 rpm)	25 - 35cps
Flash point	> 180°C
Density at 25°C	1.0

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.
 Water: In all tests, 10 parts by weight.

Cream Time					
TamKat	1%	2%	5%	10%	
10°C	128sec	125sec	41sec	25sec	
15°C	100sec	69sec	36sec	24sec	
25°C	73sec	55sec	24sec	20sec	
35°C	60sec	30sec	25sec	19sec	
Rise Time					
TamKat	1%	2%	5%	10%	
10°C	10min	5m:49sec	124sec	78sec	
15°C	9min	5m 5sec	120sec	75sec	
25°C	8min	4m:45sec	115sec	63sec	
35°C	5min	3m:4sec	108sec	60sec	
Expansion Rate					
TamKat	1%	2%	5%	10%	
10°C	800%	1100%	1500%	2800%	
15°C	900%	1400%	2000%	2900%	
25°C	1000%	1500%	2500%	3000%	
35°C	1000%	2000%	2500%	3000%	

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 crystallization.

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

▶ Application Guidelines

TamPur 100 is a complete system for water cut off in concrete, masonry structures and sandy soils even when strong leaks are encountered. Adaptable reaction time is possible by varying the catalyst ratio from 2% to 10%.

Reaction with the water results in the formation of a 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 10 minutes to 30 seconds. See table of reaction times overleaf.

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 (Tam HP1) or for large water leaks with high volume and low pressure (Tam HP2).

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

▶ Related Products

TamPur Ecoclean
TamPur Cleaner

▶ Yield

1kg = 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 1 year can be expected.

▶ Health & Safety

TamPur 100 / TamKat 100 should only be used as directed. We always recommend that the Health & Safety data sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Health & Safety data sheet is available upon request from your local TAM International representative.