

Injection Resin – Thixotropic Silicate Polyurethane Grout

## DESCRIPTION



TamPur RBG (Rock Bolt Grout) is an injectable, two-component, silicate modified, solvent-free, polyurethane grout. RBG has been formulated for securing and sealing rock bolts in mining and tunnelling applications. It is designed to instantly thicken after injection retaining a thixotropic nature within the rock bolt hole to avoid reflux and allow sufficient time for installing solid rock bolts. It is especially effective in vertical bolting applications, and can also be injected through SDA's (Self-Drilling Anchors).

There are three versions of TamPur RBG available, Slow, Standard and Fast set, in order to meet the requirement for different application conditions and processes.

## KEY BENEFITS

- > Easy installation and fixation of rock bolts
- > Full encapsulation of rock bolts even in broken, fractured ground, also enabling excellent corrosion protection
- > Non-foaming even in contact with water and will not absorb water
- > Thixotropic properties provides easy, secure and precise injection
- > Good adhesion to wet and damp substrates
- > Can penetrate small rock fractures and voids
- > Fast reaction even underwater
- > Fire resistant
- > Low odour
- > Environmentally friendly
- > User friendly – may be injected either manually or automatically

## TYPICAL APPLICATIONS

- > Rock bolting applications
- > Cable bolt grouting
- > Sealing of large rock fissures
- > Consolidation of broken ground

## TECHNICAL DATA

TamPur RBG			
	Component A	Component B	
Colour	Clear-light straw liquid	Brown liquid	
Density at 25°C	1.45 - 1.59 g/cm <sup>3</sup>	1.15 - 1.25 g/cm <sup>3</sup>	
Viscosity at 25 °C	896 mPa.s	536 mPa.s	
Reaction data: A:B 1:1 Volume (80g in plastic cups)			
	<b>Slow</b>	<b>Standard</b>	<b>Fast</b>
Gelling time (@10°C)	~7 min	~5.5 min	~3 min
Gelling time (@20°C)	~3.5 min	~2.5 min	~75 sec
Gelling time (@25°C)	~2.5 min	~2 min	~70 sec
Set time (@10°C)	~22 min	~19 min	~4 min
Set time (@20°C)	~6 min	~5 min	~95 sec
Set time (@25°C)	~5.5 min	~4 min	~90 sec
Reaction data: A:B 1:1 Volume (32mm hole with Normet R25 SDA)			
	<b>Slow</b>	<b>Standard</b>	<b>Fast</b>
Gelling time (@20°C)	~8 min	~4 min	~90 sec
Set time (@20°C)	~15 min	~10 min	~2 min
<b>Mechanical properties</b>			
Pull out strength (@20°C) After 2 hours (all grades)	> 25 MT Based on maximum bar yield (results above 80 MT have been achieved)		

\* TamPur RBG Part B is the same for all three grades – only the Part A grades are different.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

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## APPLICATION GUIDELINES

Components A and B of TamPur RBG are delivered ready-to-use. They are injected in the ratio of 1:1 by volume using a two component injection pump equipped with a suitable in-line static mixer.

Note: The curing reaction time will vary depending on the temperature of the TamPur RBG resin, the strata and the ground water. Both components should be stored and conditioned to 10°C or above prior to application.

To achieve thorough mixing of components A & B during injection, use of a suitable in-line static mixer in connection with the mixing head is essential. For suitable static mixer lengths, please contact your local Normet sales representative.

Both components A & B drums should be thoroughly shaken or otherwise homogenized before use.

For full application details, please contact your local Normet sales representative.

## PACKAGING

The standard packaging for TamPur RBG is:

Kit - 40 Litre Steel Drum	
Component A	29.5 kg
Component B	22.5 kg

Packaging size may vary subject to local regulations and requirements.

## STORAGE

Resins must not be subjected to freezing conditions during transportation and storage. Keep out of direct sunlight, in a well-ventilated area where the average temperature is between 10°C and 45°C, then a shelf life of 12 months can be expected. The product can withstand temperature spikes of up to 55°C for up to 24 hours. When stored at constant high temperature above 35°C, a shelf life of six months can be expected.

## HEALTH & SAFETY

TamPur RBG 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 Health & Safety data sheet is available upon request from your local Normet representative.