

CONSTRUCTION CHEMICALS

Stabilisation, Underpinning and Consolidating Polyurethane Grout

TECHNICAL DATA SHEET

DESCRIPTION



GeoTek LV is a low viscosity, single shot 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, forming a rigid polyurethane foam.

KEY BENEFITS

- > High expansion ratio > 17 times
- Low viscosity
- > Solvent-free, environmentally safe.
- > Reacts with saline and mineral water
- > Good chemical resistance

TYPICAL APPLICATIONS

- Soil stabilisation
- > Underpinning foundations
- > Consolidation for ground anchors
- Water cut off barriers
- Injection into saturated ground

TECHNICAL DATA

GeoTek LV		
Appearance	Brown liquid	
Viscosity at 20°C		
Brookfield DV 11 spindle no. 2	20 - 45 mPa-s	
at 60 rpm		
Flash Point	> 150°C	
Density at 20°C	1.1	
GeoTek Kat LV		
Appearance	Clear liquid	
Viscosity at 20°C		
Brookfield DV 11 spindle no. 21	20 - 35 mPa-s	
at 60 rpm		
Flash Point	> 130°C	
Density at 20°C	0.97	

Reaction Times - GeoTek LV		
All Tests Carried Out at 20°C and 50g scale		
GeoTek LV	100 parts by weight	
GeoTek Kat	As a percentage of GeoTek LV by weight, as stated in the results	
Water	In all tests, 10 parts by weight	
GeoTek Kat	Reaction Time	Solidification
2%	< 300 seconds	12 minutes
5%	< 120 seconds	5.5 minutes
10%	< 55 seconds	3.5 minutes

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

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APPLICATION GUIDELINES

GeoTek LV is used for soil stabilization in water saturated ground to form tieback anchors in loose soils giving high strength in a short period of time. It is also used for the underpinning of foundations and concrete constructions to help prevent any further movement and to improve bearing capacity.

Adaptable reaction time is possible by varying catalyst ratio between 2% to 10%. Reaction with water results in the formation of a rigid polyurethane, which forms in combination with the substrate, a hydrophobic and chemically resistant solid mass with good compressive and shear strength.

The end product formed is harmless to the environment and resistant against biological attack. The pre-mixed resin can be pumped by means of a single component injection pump. Clean the pump thoroughly using TamPur EcoClean after use.

The table (reaction times) in front shows the relation between the dosage of GeoTek Kat and the reaction time.

Note: 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.

Important: Keep containers sealed whilst not being used. Moisture may be absorbed into the GeoTek LV 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.

RELATED PRODUCTS & EQUIPMENT

TamPur EcoClean Normet Injection probes Normet Hand pumps (Electric and air driven pumps)

STORAGE

GeoTek LV 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

GeoTek LV 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.