

# Poly-Grout 100

## Single component hydrophilic flexible polyurethane grout

### USES

Poly-Grout 100 is a single component hydrophilic polyurethane prepolymer which when it reacts with water produces an elastic hydrogel which can be used in a variety of applications including:

- Sealing of water leakage in sewerage and drain pipes
- Ground stabilisation
- Sealing of water leaks through expansion joints
- Sealing of water leaks through embankments
- Dust control in stockpiles

### ADVANTAGES

- Increases up to five times its original mixed volume
- Does not redissolve in water
- Not harmful to the environment

### DESCRIPTION

Poly-Grout 100 is a specially formulated hydrophilic polyurethane prepolymer. Which when mixed with water reacts to form a white, soft gelatinous gel/foam.

### PROPERTIES

<b>Appearance:</b>	Amber clear liquid		
<b>Viscosity (cps)</b>			
@ 25°C	1900 - 2100		
@ 80°C	100 - 300		
<b>Gel time:</b>	Mix Design A	Mix Design B	Mix Design C
Poly-Grout 100	2000	2000	2000
Water	400	400	400
Retarder	3.5	4	5
Gel time (min)	10	20	30
Note: Mix design by weight			
<b>Foaming ratio:</b>	approx 5 times original volume after mixed with water		

### APPLICATION INSTRUCTIONS

#### MIXING

Typically once mixed with water in the ratio:

Poly-Grout 100	50-80%
Water	50-20%

Poly-Grout 100 will begin to react within 45-50 seconds to form a white, soft gelatinous gel/foam. A higher Poly-Grout 100 to water ratio will produce a stronger gel and vice versa.

Poly-Grout 100 can also be used together with a retarder to adjust the gel time for various application environments and processes (see properties section). Note that it is vitally important that the retarder is added and mixed into the water before adding to the Poly-Grout 100 in order to get the full retardation effect.

#### APPLICATION

There are a number of application methods used for Poly-Grout 100. The application method used is usually dictated by the project.

#### INTERNAL PACKER METHOD

This method is designed for use in small non-traversable pipes and is usually used in conjunction with a closed circuit TV system. Where a leak has been detected, a mixture of Poly-Grout 100 and water (in the predetermined ratio) is forced out through the leaking joint, crack or hole where it gels to form a waterproof seal.

#### DIRECT INJECTION

This method can be used in larger diameter pipes where there is direct access. This allows the Poly-Grout 100 water mixture to be injected outwards through the leaking crack or hole into the surrounding ground. Or alternatively by drilling a hole adjacent to the leak, injecting through the hole and flowing back into the crack or hole. The hole drilled can be later sealed with Poly-Grout 100.

## COATING

Poly-Grout 100 sprayed in light concentrations with water can be used for the stabilisation of embankments, sand dunes, stockpiles etc. With the use of the retarder a longer potlife system can be achieved which can be easily sprayed through a single component airless machine.

## ESTIMATING

### SUPPLY

**Poly-Grout 100:** 20 kg drum

**Poly-Grout 100 Retarder:** 1 kg container

### COVERAGE

Usage rates will vary depending upon the application being undertaken. As a guide, 800g of Poly-Grout 100 mixed with 200g of water will yield around 5 litres of gel/foam after reacting.

### STORAGE

Poly-Grout 100 has a shelf life of 12 months if stored in original packing under dry warehouse conditions. High temperature and high humidity may reduce shelf life.

## ADDITIONAL INFORMATION

Parchem provides a wide range of complementary products which include:

- Decorative concrete solutions including stamped and stencilled patterned concrete
- Colour Thru concrete oxides
- Concrete resurfacing products
- Sealer and sealer accessories
- Concrete and soil compaction products
- Concrete pumping, power equipment and vibrators
- Concrete hand and power finishing products
- Surface preparation equipment including grinding and polishing machines and accessories
- Concrete repair, grouts and anchors
- Waterproofing and adhesives
- Industrial flooring systems
- Engineering and architectural coatings
- Jointing systems and waterstops

For further information on any of the above, please consult with your local Parchem sales office.

## IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

## PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.