PRODUCT DATA SHEET

PRO-STRUCT®

618R

RESIN GROUTING COMPOUND

LOW VISCOSITY FOR EASY POURING
QUICK STRENGTH DEVELOPMENT
GENERAL PURPOSE LIQUID ADHESIVE

PRODUCT DESCRIPTION:
A two component solvent-free epoxy liquid designed to have excellent surface wetting properties, with a long working time. The cured mechanical properties achieved make it the ideal construction site general purpose liquid resin system.

USES:
- Grouting reinforcing bars and holding down bolts.
- Bonding concrete bricks, tiles and other construction products where a thin glue line is required.
- Sealing surface concrete cracks.
- Laminating with Chopped Strand Mat onto concrete or timber.
- Versatile grouting compound when mixed with graded dry aggregates (refer to the Pro-Struct 618/22 product data sheet).

PACKAGING & COVERAGE:
1 Litre and 5 Litre kits – Part A and B
2m²/litre at 0.5mm thick

SURFACE PREPARATION:
Surfaces must be clean, sound and dry. Exposed concrete surfaces must be sandblasted or chipped to show the well-bonded main aggregate. Steel should be grit-blasted, clean, free of rust, paint or foreign matter likely to affect the bond or performance of the repair.

MIXING:
Precondition material to between 15°C and 25°C before using. Premix each component of the kit. Add the Activator component to the Base component and mix thoroughly for 3 minutes with a slow speed drill. Do not aerate or mix more material than can be placed in 30 minutes. To prepare an epoxy mortar, slowly add pre-packaged Pro-Struct 622 Dry graded aggregate to a kit of mixed resin and mix to a uniform consistency.

TYPICAL PROPERTIES AT 25°C

Colour	Amber
Consistency	Liquid
Volume Solids	100%
Number of Components	2
Mix Ratio by Volume (Base:Activator)	2:1
Pot Life	60 to 90 Minutes
Apply Over	Prepared metal and concrete surfaces
Apply By	Pouring or trowel
Initial Set	8 Hours
Service	24 Hours
Full Cure	7 Days
Application Temperature Range	15°C to 35°C
Maximum Service Temperature	60°C
Compressive Strength	> 50 MPa at 7 days
Steel to Steel Bond	> 8 MPa
Concrete Bond Strength	Breaks concrete
12mm Rebar Pull-out Depth 126mm	Bar failure 50.8KN
20mm Rebar Pull-out Depth 200mm	Bar failure 143.4 KN
Shelf Life	24 Months if stored between 15°C to 35°C
VOC	< 3 g/l

APPLICATION:
Refer to various methods specified for appropriate use. For crack injection, refer to the Pro-Struct 618LV product data sheet.

CLEAN-UP:
Clean equipment immediately after use with Pro-Struct 105 Cleaner and rinse with clean water.

LIMITATIONS:
Application temperature of substrate to be 15°C and rising. Low temperatures adversely affect application spread rates and time to achieve bond. Hot temperatures decrease working time. Do not apply over wet surfaces. Do not thin with solvent.

PRECAUTIONS:
Use materials in strict accordance with the manufacturer's Material Safety Data Sheet. Protective clothing and equipment will significantly reduce risk of injury. Body coverage apparel, safety goggles and impermeable gloves are recommended. In case of contact, flush with copious amounts of water and seek medical attention. Dispose of waste materials and containers in strict accordance with Government Regulations.

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

FORMULA FOR CALCULATING MATERIAL USAGE

METHOD FOR CALCULATING RESIN USAGE IN LITRES FOR GROUTING REINFORCING BARS, HOLDING DOWN BOLTS, ETC.

$$\text{No. OF LITRES} = \frac{0{,}8\,(D - d)\,(D + d)\,ht}{1\,000\,000} \times \text{No. OF HOLES}$$

WHERE D = Diameter of hole
d = Diameter of bar or rod
ht = Depth of hole

NB: Take ALL dimensions in mm

Note: Diameter of hole should be 1,25 – 1,5 times diameter of bar or rod.

Depth of hole should be 10 times diameter of bar or rod for reinforced concrete and 15 times for mass concrete.

ALLOWABLE SPACING AND EDGE DISTANCE (D = ANCHOR DIAMETER)

	Distance for full anchor capacity (Critical Distance)[1]	Distance for reduced anchor capacity
Edge Distance – Tensile Load	12D	4D
Spacing Between Anchors	24D	8D
Edge Distance – Shear Load	12D	4D

CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NON-FERROUS TOOLS AND TO WEAR CONDUCTIVE AND NON-SPARKING SHOES.

PRO-STRUCT®

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