

EPIGROUT S

HIGH PERFORMANCE, HIGH STRENGTH,
FLUID EPOXY GROUT



DESCRIPTION:

RLA EPIGROUT S is a two component, high performance, pre filled epoxy grout, suitable for use as a pourable or fluid grouting material. RLA F4 Fillers may be added to produce a high build epoxy mortar or a pourable flowable grout for deep pour applications. Epigrout S can be applied underwater and is chemically resistant to seawater.

RECOMMENDED USE:

- Grouting heavy duty supports beneath crane and transporter rails
- Anchoring bolts, bars and fixings
- Bonding new to old concrete
- Adhesive promoter
- Filling in holes, cavities
- Repairing cracks in horizontal surfaces
- Grouting off column bases
- High strength repair mortar if mixed with F4 or F6 Fillers
- As a protective coating for concrete and steel structures
- Reinforcement bar primer
- Corrosion protection on steel reinforcement prior to application of concrete repair mortar
- Grouting from 5mm to 120mm in a single application or (120mm - 300mm with Epilox F6)

FEATURES AND BENEFITS:

- High flow properties
- Bonds to damp substrates
- Rapid hardening and strength gain
- High chemical resistance
- Pre-measured kits make for ease of use
- High tensile and compressive strength
- 100% solid epoxy
- Excellent adhesion to most substrates
- Cures at temperatures down to 5°C
- Negligible shrinkage
- High mechanical strength
- Solvent free
- High early strength
- Suitable for underwater application

SURFACE/SUBSTRATE PREPARATION:

Clean the surface and remove dust, unsound material, plaster, oil, paint, grease, corrosion deposits, algae and general contaminants. Roughen the surface and remove laitance and expose aggregate by light scabbling and grit blasting. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of proprietary degreaser. All residual ponding water must be removed; the substrate may be damp but not wet. All anchor bolt holes must be free from water and debris prior to placing of Epigrout S. Steel surfaces such as reinforcement bars should be grit blasted or scabbled to remove any corrosion.

MIXING:

The mix ratio is 4:1 by volume

- 4 parts Part A; and
- 1 part Part B by volume
- Any steel reinforcement and formwork should be prepared, cut to size and shape and made ready for assembly before mixing commences
- Care should be taken to ensure that Epigrout S is thoroughly mixed. The hardener and base components should be stirred separately before mixing to disperse any settlement.
- Pour the entire contents of the hardener (Part B) tin into the base (Part A) tin
- Using a suitable slow speed drill and high shearing mixing paddle, thoroughly mix the two components for 2 minutes until fully uniform colour is obtained
- Scrape the sides of the tin to incorporate all material and mix for a further 2 minutes until well combined and a uniform consistency is achieved

IMPORTANT:

- Only mix as much Epigrout S that can be used within the pot life (25-30 mins @ 25°C)
- When mixed in large volumes >10 litres Epigrout S is highly likely to cure faster thus reducing the pot life of the mixed material in the pail
- DO NOT dilute Multipurpose Epoxy with solvents as this will severely affect the performance of the product.
- Do not attempt to rework or re-temper any partially set product. NB: Liquid Epoxy grout will exotherm and set prematurely if not used within the pot life
- Do not over mix as this may entrap excess air in the mix

Low Temperature working

- To facilitate mixing and application at temperatures below 10°C, individual Part A and Part B components should be warmed in hot water bath or conditioned to room temperature up to a maximum temperature of 25°C before mixing
- Alternatively, the material should be stored in an environment controlled to 20°C and only removed immediately before use.

Note: In low temperatures <15°C, the grout will be slower in obtaining strength gain as the rate of achieving exotherm will be slower

High temperature working:

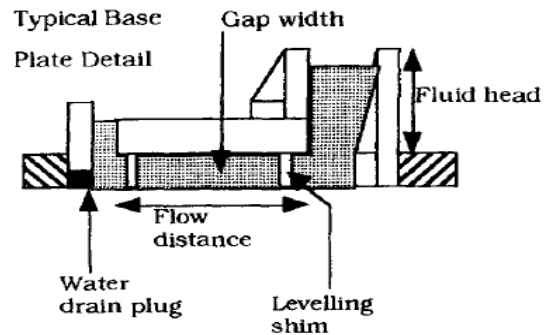
- At ambient temperatures above 30°C, the material should be stored in the shade or in an air-conditioned environment for 12 hours before use

Note: Working and setting times are reduced at higher temperatures

APPLICATION INSTRUCTIONS:

APPLICATION BY POURING INTO FORMWORK:

This method is commonly used for base plate installation where intimate contact between the grout and base plate is essential to the operation of the equipment being installed. The formwork to be constructed must be leakproof and watertight. To achieve this, it is recommended that foam rubber strips or a suitable sealant such as polyurethane or silicone be used to seal up the joints in the boxing. See drawing 1.1 for typical formwork detail below



Drawing 1.1

METHOD:

- Place the mixed Epoxy S in the reservoir and maintain the level of the liquid by topping up the grout
- Do not allow the level in the header box to fall below the bottom of the base plate.
- Ensure all formwork, shims etc are greased or coated with RLA STRIPFORM prior to grouting

Epigrout S is suitable for pumping. Where Epigrout S is used as an anchoring grout it may be poured or pumped directly into the prepared hole in the concrete prior to placing the fixing.

COVERAGE:

One litre will cover 1m² at 1mm thick. Epigrout S can be used as an epoxy bonding agent for new and old concrete the coverage rate is 4-5m² / litre.

DEEP POUR APPLICATIONS:

- For applications requiring grout greater than 120mm and up to 300mm, - add 2 x 20kg (40KG) RLA Epilox F4 Fillers to a 15litre kit of Epigrout S
- The yield will be approximately 32 litres with the addition of the Epilox F4 Fillers
- Mix Epigrout S Part A and B as per mixing instructions until combined
- Add the contents of the 1st bag of Epilox F4 Fillers and mix to disperse ensuring a uniform mix is achieved
- Add the second bag of Epilox F4 Fillers and mix for 5 minutes again ensuring a uniform consistency

CLEAN UP:

- Clean all equipment and uncured material with solvent
- Cured Epigrout S can only be removed by mechanical means

SHELF LIFE/STORAGE:

- 2 years when stored in original unopened packaging
- Best stored in a dry area between 5°C and 35°C
- Keep out of direct sunlight

PACKAGING:

- 15litre kits

LIMITATIONS:

- The recommended application temperature is between 5°C and 30°C. Refer to Mixing section for recommendations for low and high temperature working
- Working and setting times will be reduced at higher temperatures
- The product will exotherm and develop an increase in temperature, hence the larger the volume the greater the rate of exotherm
- In low temperatures <15°C the rout will be slower in obtaining strength gain as the rate of achieving exotherm will be slower
- DO NOT dilute Epilox S with solvents as this will severely affect the performance of the product.
- Only mix as much Epilox S that can be used within the Pot Life (45-60 minutes @ 25°C).

HEALTH AND SAFETY:

For information and advice on the safe handling, first aid, storage and disposal of chemical products, users must refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

TECHNICAL DATA:

Properties of Epigrout S without F4 Fillers

PRODUCT INFORMATION:	
Form	Thixotropic liquid
Colour	Hardener – Black Base – White Grey when mixed
Viscosity	Flowable/pourable
Solids content	100%
Density	1.6kg/litre
Mix ratio	4:1
PERFORMANCE DATA: Tested to AS1478.2	
Compressive Strength	119MPa
Flexural Strength	30MPa
Bond Strength	15MPa
Slant Shear Bond Strength	40MPa (substrate failure)
Service Temperature	-20°C to +50°C
Hardness	>80 Shore D
Water Absorption	<0.2% (10 days @ 25°C)
Modulus of Elasticity	14GPa
Heat Distortion Temp	80°C
Chemical Resistance	Very Good
SETTING TIMES @ 20°C	
Min/Max Application Temp	+ 5°C - +35°C
Pot life	25-30 mins @ 25°C
Tack free time	50mins @ 25°C
Initial Cure	12hours
Full Cure	7 days

TECHNICAL DATA:

Properties of Epigrout S with F4 Fillers

PRODUCT INFORMATION:	
Form	Thixotropic liquid
Colour	Hardener – Black Base – White Grey when mixed
Viscosity	Flowable/pourable
Solids content	100%
Density	1.6kg/litre
Mix ratio	4:1
Yield: 15litre Epigrout S + 2 x 20kg bags F6 Fillers	32 Litres
PERFORMANCE DATA: Tested to AS1478.2	
Compressive Strength	105MPa
Flexural Strength	30MPa
Bond Strength	15MPa
Slant Shear Bond Strength	40MPa (substrate failure)
Service Temperature	-10°C to +50°C
Hardness	> 80 Shore D
Water Absorption	<0.2% (10 days @ 25°C)
Modulus of Elasticity	14GPa
Heat Distortion Temp	80°C
Chemical Resistance	Very Good
SETTING TIMES @ 20°C	
Min/Max Application Temp	+ 5°C - +35°C
Pot life	60-90 mins @ 25°C
Tack free time	60mins @ 25°C
Initial Cure	12hours
Full Cure	7 days

Temp °C	STRENGTH DEVELOPMENT OVER TIME AT INCREASING TEMPERATURES					
	1hr	2hrs	3hrs	4hrs	5hrs	6hrs
10	0	0	7	15	27	42
15	2	7	10	18	30	55
20	25	40	72	81	88	93
25	33	45	77	85	90	100
30	45	53	82	97	101	109
35	55	64	87	104	110	114

WARRANTY STATEMENT:

RLA Polymers guarantees this product against manufacturing defects and guarantees it to be manufactured to our published specification.

We certify that this product is suitable for use when fully cured and will perform as described in our technical data sheet or other published materials.

RLA Polymers will replace the product free of charge when purchased from any legally verifiable source and where a product is proven to have been stored, handled, and install according to instructions published on our packaging and within the stated shelf life. The Installation of all materials must be carried out in accordance with relevant Australian Standards.

Warranty doesn't apply if damage, loss, failure to follow instructions, or other circumstances are out of our control.

Sufficient time and access to investigate any complaint must be accorded to RLA Polymers.

The consumer is responsible for any expenses incurred in making a claim.

A claim form can be requested by:

PHONE: 1800 242 931

EMAIL: info@rlapolymers.com.au

MAIL: 215 Colchester Road Kilsyth Victoria 3137
(Attention Customer Service)

WEBSITE: www.rlapolymers.com.au

AUSTRALIAN CONSUMER LAW:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality, and the failure does not amount to a major failure. The benefits under our warranty are in addition to other rights and remedies available to the consumer under the law in relation to the goods and services to which the warranty relates.

DISCLAIMER:

All statements and technical information contained herein are based on tests we believe to be reliable, but the accuracy thereof is not guaranteed.

Users assume all risk and liability resulting from the use of the product and must confirm the suitability thereof by their own tests. Conditions of Sale contain a limited warranty against manufacturing defects.

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