# HEAVY DUTY BACKING GROUT (5137)

## NON-SHRINK, HEAVY DUTY BACKING GROUT

## DESCRIPTION

**EPIREZ® Heavy Duty Backing Grout** is a non-shrink, heavy duty epoxy grout. It will flow into fine voids and cavities down to 2 mm and harden to produce an extremely tough, impact resistant backing.

**EPIREZ® Heavy Duty Backing Grout** is recommended as a backing grout for crusher manganese steel liners. It provides Immediate and effective support to the components, as well as maximum protection for supporting structures throughout the life of the liner.

**EPIREZ® Heavy Duty Backing Grout** has been chosen by major mining and quarrying operators for over 30 years throughout Australia, Asia and the Pacific region.

**EPIREZ® Heavy Duty Backing Grout** was previously named **EPIREZ® 5137**

## INTENDED USE

- Long life backing of crushing equipment
- High strength bearing supports
- Grouting of machine bases in corrosive environments
- Grouting of bridge footings
- Rail grouting

## PRODUCT FEATURES

- Non-shrink
- Excellent mechanical strength
- Easy mixing – no aggregate
- Good chemical resistance
- High compressive strength
- Suitable for pours * from 2mm to 50mm

*Dependent on volume of pour, please consult ITW Polymers & Fluids Technical Department for specific recommendations.

## ESTIMATING DATA

10 kg **EPIREZ® Heavy Duty Backing Grout** = 6 Litres

## TYPICAL PHYSICAL PROPERTIES

Technical data should be considered representative or typical only and should not be used for specification purposes.

| | | TEST METHOD |
|---|---|---|
| Appearance of Compound | Yellow, non-settling paste | |
| Appearance of Hardener | Blue, thin liquid | |
| Colour (mixed) | Green | |
| Shelf Life | 2 years | |
| Mixing Ratio by Volume | 1 Hardener to 5 Compound | |
| Mixing Ratio by Weight | 1 Hardener to 10 Compound | |

| | | |
|---|---|---|
| Initial mixed viscosity | < 10 Pa.s @ 25° C | |
| Work Time (10 kg mix) | 30 minutes @ 25°C | |
| Work Time (10 kg mix) | 60 minutes @ 15°C | |
| Setting Time (10 kg mix) | 6 hours @ 25°C | |
| Setting Time (10 kg mix) | 12 hours @ 15°C | |
| Cure Time (10 kg mix) | 24 hours @ 25°C | |
| Cure Time (10 kg mix) | 48 hours @ 15°C | |
| Maximum Casting Thickness | 50mm | |
| Minimum Compressive Strength* | 104 MPa | ASTM C579 (mod) |
| Brinell Hardness | 57 | |
| Maximum Service Temperature | 130°C | |
| Flammability | Self extinguishing | ASTM D635 |
| Dielectric Constant, 100 kHz, 25°C | 3.3 | |
| Dielectric Strength | 180 kV.cm | |

* Note: ASTM C 579 (MOD): Epoxy grouts cure by a chemical reaction that produces exothermic heat. The 50 mm cube samples specified by ASTM C 579 Test Method B do not produce enough exotherm to provide full cure in an efficient timeframe. To improve efficiency in testing, product samples are heated to 77°C for four (4) hours. This forces the sample to cure to the same degree as a larger grout pour. ASTM permit modifications of this test as long as they are noted in the report.

For further information refer to Technical Bulletin: EPIREZ® – Compressive Strength Procedures for Epoxy Grouts.

## SURFACE PREPARATION

Prepare surfaces for adhesion or release as desired. New concrete should be at least 28 days old.

Formwork which provides a “head” of material will facilitate flow into finer cavities and voids.

Surface preparation guidelines cannot cover all site or field contingencies and it is always recommended that an on-the-spot adhesion test be performed as part of the Standard Quality Assurance audit for the project.

## MIXING INSTRUCTIONS

It is strongly recommended that full units be mixed, as ratios are pre-measured.

Proper homogenous mixing of resin and hardener at the correct ratio is essential for the curing and development of stated properties.

Precondition product to between 18 to 25°C before use.

Pour contents of Hardener into Compound container and mix thoroughly for 5 minutes using a suitable blade fitted to a 400 rpm power mixer.

Ensure that all the material on the sides, under the lip of the container and on the stirrer is incorporated.

Note: Take care to avoid air entrapment into the mix. Keep propeller below liquid line, as additional air can be added to mixture, resulting in air bubbles on the surface of the finished product.

## APPLICATION INSTRUCTIONS

Prepare surfaces for adhesion or release as desired. New concrete should be at least 28 days old. Formwork which provides a “head” of material will facilitate flow into finer cavities and voids. Pour contents of Hardener into Compound container and mix thoroughly for 5 minutes using a suitable blade fitted to a 400 rpm power mixer. Ensure that all the material on the sides and on the bottom of the container is incorporated. DO NOT AERATE. Pour mixed material slowly, from one side only, so as to avoid air entrapment.

Surface preparation guidelines cannot cover all site or field contingencies and it is always recommended that an on-the-spot adhesion test be performed as part of the Standard Quality Assurance audit for the project.

## CLEAN UP

Tools and equipment may be cleaner before hardening commences by washing in **Epirez® Clean Up Solvent**. Do not use for cleaning hands or mixing with product.

## STORAGE

Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames. Protect from frost. When stored in original sealed containers, the minimum shelf life is two years.

## PRECAUTIONS

Heavy Duty Backing Grout should not be applied at temperatures below 10°C

## WARRANTY

Epirez will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

## DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Polymers & Fluids and EPIREZ® makes no representations or warranties of any kind concerning this data.

## ORDER INFORMATION

| **Item No.** | **Package Size** |
|---|---|
| E951377 | 10kg |

## CONTACTS

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For Health & Safety information, refer to Safety Data Sheet available from ITW Polymers & Fluids upon request or available on our website.