



# TECHNICAL DATA

## Heavy Duty Backing Grout

### ***EpiRez<sup>®</sup> 5137***

#### **Description**

**Heavy Duty Backing Grout (5137)** is a non-shrink, heavy duty epoxy grout. It will flow into fine voids and cavities down to 2mm and harden to produce an extremely tough, impact resistant backing.

**Heavy Duty Backing Grout (5137)** 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.

**Heavy Duty Backing Grout (5137)** has been chosen by major mining and quarrying operators for over 25 years throughout Australia, Asia and the Pacific region.

#### **Areas of application**

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

#### **Features**

- Non shrink
- Excellent mechanical strength
- Easy mixing – no aggregate
- Good chemical resistance
- Excellent flow characteristics
- 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.

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The information contained in this Technical Bulletin is as up to date and correct as possible as at the time of issue. The data provided should be used as a guide only as the performance of the product will vary depending on differing operating conditions and application methods.

The sale of any product described in this Technical Bulletin will be in accordance with ITW Polymers & Fluids Conditions Of Sale, a copy of which is available on request. To the extent permitted by law, ITW Polymers & Fluids excludes all other warranties in relation to this product.

## General Properties

### Typical Data

		Test Method
Shelf Life	: 2 Years	
Mixing Proportions by Weight	: 1 Hardener to 10 Compound	
Mixing Proportions by Volume	: 1 Hardener to 5 Compound	
Initial Mixed Viscosity, 25°C	: < 10 Pa.s	
Colour when mixed	: Olive Green	
Work Time of 10kg Mix	: 30 minutes @ 25°C 60 minutes @ 15°C	
Setting Time	: 6 hours @ 25°C 12 hours @ 15°C	
Cure Time	: 24 hours @ 25°C 48 hours @ 15°C	
Maximum Casting Thickness	: 50mm	
Minimum Compressive Strength	: 104 MPa	ASTM C579 <sub>(MOD)</sub>
Brinell Hardness	: 57	
Maximum Service Temperature	: 130°C	
Flammability	: Self extinguishing	ASTM D 635
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.

## Estimating Data

10 kg Heavy Duty Backing Grout (5137) = 6 Litres

## Application Directions

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.

## Cleaning

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

## Limitations

**Heavy Duty Backing Grout (5137)** should not be applied at temperatures below 10°C.

## Storage and Shelf life

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 containers the minimum shelf life is 2 years.

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### AUSTRALIA

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### NEW ZEALAND

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## Packaging

**Heavy Duty Backing Grout (5137)** is available in 10kg kits. A kit contains the Hardener and Compound in correct proportions for use.

## Ordering Information:

10kg #E951377

## Note

The figures quoted for work time, setting time and cure time are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

## Health & Safety Information

The product is hazardous. A Material Safety Data Sheet is available from the ITW Polymers & Fluids Technical Department upon request or available on our website [www.epirez.com.au](http://www.epirez.com.au).

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