



# TECHNICAL DATA

## High Early Strength Backing Grout

### ***Epirez<sup>®</sup> 5137 HES***

#### **Description**

**High Early Strength Backing Grout (5137HES)** is a non-shrink, heavy duty epoxy grout with faster strength development than the **Heavy Duty Backing Grout (5137)**. It will flow into fine voids and cavities down to 5mm and harden to produce an extremely tough, impact resistant backing.

**High Early Strength Backing Grout (5137HES)** is recommended for heavy duty rail machinery grouting where rapid cure is required. It provides effective support to all components and ensures long term support in harsh environments.

#### **Areas of application**

- Long life backing of crushing equipment
- Grouting of bridge footings
- Grouting of machine bases in corrosive environments
- High strength bearing supports
- Grouting printing presses
- Grouting of shipboard machinery
- Heavy duty rail grouting

#### **Features**

- Non shrink
- Excellent mechanical strength
- Fast strength development
- Easy mixing – no aggregate
- Good chemical resistance
- Good flow characteristics
- Multipurpose
- Cooler temperature applications
- Suitable for pours\* 5mm 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

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	: 20 Pa.s
Colour when mixed	: Grey
Work Time of 10kg Mix, 25°C	: 20 minutes
15°C	: 40 minutes
Setting Time, 25°C	: 1 hour
15°C	: 2 hours
Cure Time, 25°C	: 6 hours
15°C	: 12 hours
Maximum Casting Thickness	: 45mm
Compressive Strength	: > 80 MPa
Compressive Modulus	: 4.7 Gpa
Elongation at Break	: 1%
Tensile Modulus	: 2.9 Gpa
Brinell Hardness	: 57
Maximum Service Temperature	: 130°C
Flammability ASTM D 635	: Self extinguishing
Dielectric Constant, 100 kHz, 25°C	: 3.3
Dielectric Strength	: 180 kV/cm

## Estimating Data

10 kg High Early Strength Backing Grout (5137HES) = 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

**High Early Strength Backing Grout (5137HES)** 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

ITW Polymers & Fluids  
18-26 Amelia Earhart Avenue  
Airport Oaks, Mangere, Auckland  
Phone (09) 256 2122 Fax (09) 256 2124

## Packaging

**High Early Strength Backing Grout (5137HES)** is available in 10kg packs. Each pack contains Hardener and Compound in correct proportions for use.

### Ordering Information:

10 kg      #E951372

## Safety precautions

Avoid contact with skin and avoid breathing vapour. Wear gloves and goggles when mixing and using. Keep away from children. Provide adequate ventilation if applied in confined spaces. If poisoning occurs call Doctor or Poisons Information Centre. If swallowed **DO NOT** induce vomiting. Give plenty of water or milk. If skin contact occurs remove any contaminated clothing and wash affected areas thoroughly with soap and water.

**TDG Code:** Hardener - UN 1760      Compound - Not Classified

### 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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