EPIREZ

TECHNICAL DATA SHEET

CLASS A SUPERSTRENGTH GROUT

CONSTRUCTION GRADE NON-SHRINK GROUT

DESCRIPTION

EPIREZ® Class A Superstrength Grout is a higher strength premixed cement based, non-ferrous, non-shrink grout, exhibiting good flow characteristics. This extra performance grout offers the advantage of low water requirements and high compressive strengths.

Class A Superstrength Grout should be specified for construction site applications demanding higher performance.

Class A Superstrength Grout is supplied ready-to-use as a dry powdered product requiring only the addition of water to be used for a wide range of applications.

INTENDED USE

- Column base plates
- Anchoring fixings
- Bolt holes
- Tilt up panels and other joints
- Underpinning
- Concrete repair

PRODUCT FEATURES

- High strength increase of up to 34% from Class A General Purpose Grout
- Non-shrink
- Good flow, good base plate contact
- High early strength 50MPa in one day (Dry pack)
- Super strength 91 MPa in 28 days (Dry pack)
- Low water / cement ratio – high density / super strength
- Chloride free no re-bar corrosion
- Non-ferrous – non staining
- Versatile dry pack / trowel / pour

TYPICAL PHYSICAL PROPERTIES

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

General Properties	
Work Time	20 minutes at 25˚C
Initial Set	1 hour at 25˚C (Flowable)
Final Set	3 hours at 25˚C (Flowable)
Water Ratio	
Dry Pack	2.0Ltr / 20kg
Trowellable	3.0Ltr / 20kg
Flowable	4.0Ltr / 20kg

Typical Performance

Compressive Strength (AS 1478.2 – 2005)	**2.0 Ltr Water / 20kg**	**3.0Ltr Water / 20kg**	**4.0Ltr Water / 20kg**
1 day	50 MPa	34 MPa	17 MPa

7 days	82 MPa	62 MPa	36 MPa
28 days	91 MPa	70 MPa	45 MPa

ESTIMATING DATA

Consistency	Water / 20kg bag	Litres of grout / bag	No. of bags / m^3
Dry pack	1.8 – 2.2 litres	10.2	98
Trowellable	2.8 – 3.2 litres	10.6	94
Flowable / Pourable	4 litres	11.6	86

SURFACE PREPARATION

Foundation Preparation

All surfaces should be free from oil, grease or loose material. If the concrete surface is loose, defective or has laitance, it should be cleaned to a sound base. Bolt holes or fixing pockets should be blown clean of any dirt or debris.

Several hours prior to grouting, the prepared foundation should be flooded for pre-soaking with fresh water. Immediately prior to grouting, any standing water should be removed. Inspect pockets and bolt holes for water removal.

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

Temperature must be above 5°C for the mixing and placement of grout.

EPIREZ® Class A Superstrength Grout should be thoroughly mixed to the desired consistency by varying the amount of water used. Do not exceed recommendations.

Grout should be mixed using either a grout mixer or a suitable power mixer. Do not mix more than 5 minutes (do not remix). Once mixing and placing the grout has begun, it should be a continuous operation. Do not mix more grout than can be placed within 20 minutes.

Ensure that machine capacity and manpower is adequate to enable grouting to be carried out as a continuous operation.

Observe the accurate gauging of water addition and the mixing time. When using a mechanical mixer to prepare the grout, add approximately 90% of the recommended water requirement to the mixer first and then add the dry powder. Mix for 2 minutes before adjusting the consistency with the remainder of the water.

Mix until homogeneous for at least another 3 minutes.

APPLICATION INSTRUCTIONS

Placement

To ensure continuous grout flow any bolt holes should be pre-grouted level with the substrate. Sufficient grout must be available prior to commencement and the time taken to pour a mix balanced with the time taken to prepare the next one.

Pour from one side only to eliminate the creation of voids by entrapment of air or any surplus pre-soaking water.

A grout head must be maintained at all times so that a continuous grout front is achieved.

Make certain that the mixed grout is placed promptly (within 30 minutes of mixing) and continuously before expansion commences.

Grout bed should be finished level with the underside of the baseplate.

Curing

After grout has been placed, cover all exposed grout with wet burlap and plastic to prevent moisture loss. Maintain until grout has hardened. After cutting back or finishing, continue curing, for a minimum of 24 hours with wet burlap followed by application of a concrete curing compound to ensure long term curing. Failure to prevent early moisture loss can result in plastic cracking, drying shrinkage, cracks in grout shoulders and a possible reduction in ultimate strength development. In-service operation may commence once required grout strength has been reached.

The figures quoted for work time, flow, set time, yield and strength development 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.

CLEAN UP

Grout should be removed from tools and equipment immediately after use with clean water.

STORAGE

Store in dry conditions between 10°C and 30°C. Protect from frost. When stored in original sealed containers, the minimum shelf life is 12 months.

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**
E991627	20kg bag

CONTACTS

ITW Polymers & Fluids
100 Hassall St Wetherill Park
NSW 2164 Australia
AU Phone: 1800 000 945
itwpf.com.au

ITW Polymers & Fluids
Unit 2 / 38 Trugood Drive
East Tamaki, 2013, Auckland, New Zealand
NZ Phone: 0800 476 265
itwpf.co.nz

EMERGENCY:
AU: 1800 033 111
NZ: 0800 734 607

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