

# Centricrete

# Ready to use, hydraulically setting, polymer modified waterproof grout for injections and filling of cracks, cavities and honeycombs

#### **Product Properties**

- · Hydraulically setting, premixed, ready to use, polymer modified grout for injections
- · Creates an integral waterproofing barrier and prevents water penetration and rising dampness
- · The injection grout is waterproof and non-shrink, thereby the cracks, crevices, and cavities are optimally filled and waterproof
- · On account of its plasticizing characteristics it ensures good flow, even while gravity grouting
- · Due to high dispersion Centricrete does not settle and remains in suspension even if pumped under pressure
- · The grout develops higher compressive and flexural strengths compared to normal cement grouts
- · Alkaline therefore, it prevents the carbonation in concrete and thus effectively protects the reinforcement against corrosion
- · Improves imperviousness and resistance to aggressive industrial influences

#### **Areas of Application**

- · Foundation rafts and construction joints in basements etc.
- · Brickwork injections for damp proofing course
- · Cracks and cavities in masonry
- · Cracks in concrete where sealing and structural repairs are required
- · Voids in roofs and joints between parapet walls and slabs
- Everywhere a cementitious injection is specified or required such as in constructions and structures like bridges, flyovers, subways, underground structures, residential and commercial buildings, hotels, airports, sport stadium, sewage plants, industrial buildings, factories, sheds, warehouses reservoirs and storage constructions, powder plants, railway structures etc.

## **Application Notes**

#### General

The cracks, cavities crevices and similar damages are most undesired elements in any structure. Without exception, the people involved in construction desire a structure free from such damages. Nevertheless such damages can be effectively repaired and rectified with the **Liquid Plastics** like **Epoxy**, **Polyurethane**, etc.

Often from economical considerations repair and rectification of damages with liquid plastics turns out expensive and impractical. The result in such cases is that the structure remains unrepaired, thereby causing further damages. Hence there was a need to develop an inexpensive cementitious grout. After studying this problem thoroughly, the R&D cell of **MC-Bauchemie** designed and developed an inexpensive cementitious grout **Centricrete**, which is waterproof, non-shrink ready to use and free flowing for injection of cracks, filing of cavities, voids and crevices.

The varied properties and advantages make **Centricrete** an indispensible product for the grouting under/into basements, rafts foundations, construction joints etc. to provide an effective and durable protection. **Centricrete** is hydraulically setting, premixed, polymer modified grout for injections of structural cracks and filling the voids, cavities, crevices, and similar damages. **Centricrete** Injection Grout is produced with carefully selected water-repellent and silicifying chemical compounds and inert fillers to achieve varied characteristics like water impermeability, non shrinkage, free flow etc.

**Centricrete** can be used for monolithic injections in masonry and provides the brickwork with an excellent Damp Proof Course. **Centricrete** is supplied in ready-to-use form, only water has to be added at jobsite prior to application and can be used everywhere, where conventional normal cement mortar grout is used.

Most of the conventional grouts generally do not provide effective waterproofing, non–shrinkage and free flow characteristics and is specifically developed to replace them and ensure an effective and durable repair in structures

#### Instructions for Use

Surface preparation is needed before beginning grouting and these steps are mentioned in the section below. **Centricrete** is pumpable when the water-powder ratio is about 0.45 to 0.50 i.e. for 30 Kgs **Centricrete** 13.5-15.0 liters of water. The exact quantity of water can be determined at site depending upon the type of injecting techniques used, whether gravity or pressure, crack widths, porosity of surface to be grouted etc. In the case of pressure grouting, the pressure required varies depending on substrate condition, sizes of the cracks and voids, porosity etc.

Centricrete powder should be mixed mechanically with water until a homogenous and lump free mixture is obtained. The mixing should continue for about five minutes to achieve optimal dispersion in water. It is recommended that the powder be added to the water and not vice-versa.

The grout so mixed should be injected within 30 minutes depending upon the ambient temperatures. Do not add more water when the grout becomes too thick to use. Mix only so much grout that can be used within 30 minutes. The nozzles should be embedded in the surfaces to be grouted as well as cracks. Grout should be pumped until total filling is ensured. The nozzles or pipes can then be cut off and the holes sealed using **MC-Fix ST**.



#### **Further Instructions / Precautions**

## **Surface Preparation before Grouting**

The surfaces to be grouted by **Centricrete** must comply with the physical principles of the building concerned and should fulfill the structural requirements. The substrate must be firm and should be properly cleaned to remove loose particles, dirt, grease, oil and any other contaminations. The cracks, cavities, crevices etc. should have widths equal or greater than 2 mm for effective filling by **Centricrete**.

If the surfaces to be filled are porous, dry and absorbent, it is necessary to flush the holes with water prior to application of grout to remove debris and pre-wet the gaps. However, it should be ensured that the substrate so wetted should just be moist and there should not be standing or free water present.

# **Grouting with Centricrete**



## **Technical Data For Centricrete**

Characteristic	Unit	Value	Comments	
Bulk density	Grams/cm <sup>3</sup>	1.70- 1.72	(after mixing)	
Mixing ratio	Water/ powder	0.45 - 0.50		
Pot life	Minutes	30		

#### **Product Characteristics for Centricrete**

Type of Product	Polymer Modified, Waterproof,cementitous injection grout	
Form	Powder	
Colour	Grey	
Shelf Life	6 months from date of Manufacture	
Delivery	30 kg sacks	
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost	
Disposal	Empty packs completely and dispose off carefully to protect our Environment	

**Note:** The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees, which may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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