

# EUNIGROUT 500+

## RAPID FLOOR SELF-LEVELLING CEMENTITIOUS GROUT

### DESCRIPTION

EUNIGROUT 500+ is a premixed cementitious non-shrink grout that comes as a one-component cementitious powder blend. It requires only the addition of water to form a self-leveling floor topping. It is specifically designed to provide outstanding flow properties, shrinkage compensation, frost resistance and high compressive strength. EUNIGROUT 500+ is non-corrosive, non-oxidizing and free from chlorides and nitrates.

### USES

EUNIGROUT 500+ is suitable for various grouting applications where shrinkage is unwanted. It finds typical uses in underplate grouting, space grouting and repairs to precast concrete. It is also effective for bedding bearing plates, anchor bolt fixing, cable grouting and crane rail assembly. Additionally, EUNIGROUT 500+ can be used for concrete repairs and floor toppings, making it versatile for a range of construction projects.

### ADVANTAGES

- Non-segregating.
- Suitable for machine application.
- High strength.
- Easy to apply.
- Good self-levelling and smooth surface.
- Used for thicknesses ranging from 0.5 mm to 50 mm.
- Excellent flow retention and long usable life even at high ambient temperatures.
- High, non-corrosive bonding to steel and concrete.
- High early strength characteristics for rapid return to service.
- Non-shrink maintains maximum contact with surface.

### TYPICAL PROPERTIES

**Appearance:** Grey granular powder

**Specific Gravity:** 2.1 - 2.3 g/cm<sup>3</sup>; dependent on consistency

**Approx. Water Requirement (per 25 kg):** 3.5 - 4.0 L

**Compressive Strength (BS 6319, Part 2):**

**3 days:** ≥ 50 MPa

**7 days:** ≥ 60 MPa

**28 days:** ≥ 70 MPa

### MIXING

For optimum dispersion and workability, it is recommended to use mechanical grout mixers. Conventional or hand mixing may lead to lower workability. It is important not to exceed the minimum water content, as it can result in a loss of properties. Start by mixing the dry powder and gradually add the water over a span of 1 - 2 minutes. Continue mixing for an additional 2 - 3 minutes until the mixture is smooth and cohesive. It is advisable to maintain consistent timings for each operation to achieve consistent results whenever possible.

### APPLICATION

#### Surface Preparation

Prior to application, it is important to ensure that all surfaces are clean and in good condition. Remove any surface laitance by using acid etching or grinding methods. It is recommended to thoroughly wet all surfaces 6 - 24 hours before starting the application and maintain a moist condition during the placing process. Any excess surface water should be removed prior to applying the product. This preparation ensures optimal bonding and performance of the material.

#### Application Instructions

##### 1. Underplate grouting

When performing underplate grouting, it is recommended to use a flowing or fluid consistency grout. Ensure that the formwork is properly sealed to prevent grout leakage and maintain a minimum hydrostatic head of 100 mm. Sufficient material should be available to complete the entire task and achieve a continuous fill. It is advisable to pour the grout from one side only to prevent air entrapment, while maintaining a head on the grout to encourage smooth flow. Avoid vibrating the grout, but rods, straps and chains can be used to assist in achieving complete filling. For preplaced aggregate grout, a fluid or flowing consistency grout should be utilized and either pumped or poured into place. It is important to note that the compressive strength development and ultimate strength of the concrete may be slightly reduced compared to flowing grouts.

##### 2. Pumping

EUNIGROUT 500 can be effectively pumped using grout pumps equipped with ball valves, such as piston, ram or diaphragm pumps.

## **CURING**

Proper curing is crucial for all exposed surfaces, especially under dry and sunny conditions. Failure to properly cure the surfaces can result in reduced bond, strength and durability. Fortunately, alternative methods of curing can be employed, such as water ponding, mist spraying, or using wet hessian, among others. These methods help maintain the necessary moisture levels for optimal curing and ensure the desired performance and longevity of the material.

## **PACKAGING**

EUNIGROUT 500+ is supplied in 25 kg multiply paper bags.

## **STORAGE**

EUNIGROUT 500+ should be stored and maintained in dry and cool conditions at temperatures between 2°C and 40°C. The shelf life of EUNIGROUT 500+ is 12 months from the date of production.

## **HEALTH AND SAFETY**

For more information, please check the Material Safety Data Sheet.

## **CONTACT**

Al-Faiha for Engineering Products is the exclusive licensee manufacturer for ECA.

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