# EUNIGROUT 500 HD+

**CEMENTITIOUS NON-SHRINK & RAPID FLOOR SELF-LEVELLING GROUT** 

# ECA

# DESCRIPTION

EUNIGROUT 500 HD+ is a preblended powdered grout composed of high strength cement, graded aggregates and strength admixtures in order to achieve high strength properties. EUNIGROUT 500 HD+ when combined with water, it becomes a fluid grout that doesn't separate and can effectively fill complex spaces.

# USES

EUNIGROUT 500 HD+ is a versatile grouting solution suitable for a wide range of applications:

- Concrete and earth water retaining structures
- Concrete dams, water spillways and underwater grouting
- Under-plate grouting, space grouting
- Repairs to precast concrete
- Bedding bearing plates
- Anchor bolt fixing
- Cable grouts and crane rail assembly

# **ADVANTAGES**

- Non-gaseous grout, free of bleeding with long stability over a wide range or temperatures and humidities.
- Could be factory- or site-blended.
- Extremely fluid consistency for easy application in difficult access areas.
- Excellent flow retention and long usable life, even at high ambient temperatures.
- Non-shrinkage characteristics

# **STANDARAD**

Formulated to meet ASTM C 1107 and CRD C621 standards.

| TYPICAL PROPERTIES                                |  |
|---|--|
| Appearance  | Grey   |
| Fresh Wet Density                                 | 2.2 Kg /L  |
| Application Thickness                             | 2 mm - 5 mm  |
| Water Absorption                                  | < 0.05 %   |
| Compressive Strength<br>(BS 6319, Part 2), @ 30°C | ≥ 52 MPa @ 3 days<br>≥ 70 MPa @ 7 days<br>≥ 82 MPa @ 28 days |
| Application Temperature                           | 5 - 35 °C  |

# 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 bond ing and performance of the material.

# MIXING

For optimum dispersion and workability, it is recommended to use mechanical grout mixers. Conventional or hand mixing may lead to lower workability. Start by mixing the dry powder and gradually add the water with a ratio of (2.75 - 3.25 liters) 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 Instructions**

#### 1. Under-plate grouting

When performing underplate grouting, it is recommended to use a flowing or fluid consistency grout. Before starting to mix the grout ensure that the form-work is properly sealed to prevent grout leakage. Sufficient material should be available to complete the entire task and achieve a continuous fill.

Its important to pour the grout from one side only so as to avoid air entrapment. make sure not to vibrate the grout, but rods, straps and chains can be use to assist the complete filling. It is important to note that the compressive strength development and ultimate strength of the concrete may be slightly reduced compared to flowing grouts. 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 HD can be effectively pumped using grout pumps equipped with ball valves, such as piston, ram or diaphragm pumps.

# CURING

Good curing is crucial for all exposed surfaces, especially in dry and sunny conditions. Neglecting proper curing can result in reduced bond, strength and durability. Various methods of curing can be employed, including water ponding, mist spraying and wet hessian, among others. Regardless of the method used, it is important to maintain the curing process for a minimum of 7 days. In hot climatic conditions, extra attention should be given to curing in order to achieve optimal properties and extend the service life of the structure.

# YIELD

EUNIGROUT 500 HD+ yeilds approximately 12 - 12.5 litres per 25Kg bag.

#### PACKAGING

EUNIGROUT 500 HD+ is supplied in 25 kg bags.

# STORAGE

EUNIGROUT 500 HD+ should be stored and maintained in dry and cool conditions at temperatures between 2°C and 40°C.

The shelf life of EUNIGROUT 500 HD+ 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.

For more information, please contact us at techsupport@alfaihaengineering.com.

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