

# **GRADAGROUT 401**

## **Cement Based Grouting Mortar**

**Technical Data Sheet** 

## **Description**

GRADAGROUT 401 is a cement based, single component, flowable, ready to use grout mortar that expands to sufficiently counteract the plastic shrinkage normally associated with cement grouts.

## **Fields of Application**

 Anchoring the machine feet, - Rail beds, - Columns in pre-cast construction, - Concrete anchors, - For pile cap reprofiling and encapsulation - To fill in cavities, gaps and recesses, - Bearing plates.

#### **Features and Benefits**

Single-component and ready to use product, mixed with only water.
Adjustable viscosity, applicable easily by pouring into mould.
Has high strength.
Has good flow characteristics.
Resistant to impact.
Protects to steel against corrosion.
Prevents shrinkage after curing.

#### **Technical Data**

Content: Aggregate, cement and special additives

Color: Grey

Mixing Ratio: 25 kg CONREPA420 max. 3-3,5 L

water

Mixture Density: 2,25±0,1 g/cm3

Particle Size: Dmax: 3 mm

Compressive Strength: >20-40 N/mm2 (1 day) >60-

90 N/mm2 (28 days)

Flexural Strength: >9 N/mm2 (28 days) Application

Temperature: +5°C to 30°C

Pot Life: 40 minutes

Curing Time:

Fully Curing: 28 days HS Code: 3214.10.90.00.00

## **Application Procedure**

## **Preparation of Substrate**

Application surface must be sound, clean and clean off materials which prevent bonding, such as dust,

oil, rust and remove loose pieces. Concrete surfaces must be saturated with water before application. Immediately before pouring remove all excess or standing water from within any formwork.

## **Application Method**

25 kg bag GRADAGROUT 401 is poured slowly into 3 - 3,5 liters of clean water under low speed mixer for 3-4 minutes until obtaining homogenous mixture. Mixing water must be clean and free of salt and lime. Mixture should be applied within 40 minutes at 20°C. GRADAGROUT 401 is only applied for filling applications as 10-30 mm thickness for each layer. If required more thickness surface, aggregate can be added to grout. In case of adding extra aggregate to the grout, due to the reduction of cement percentage, performance can be reduced approximately 20-40 %. During the application surface and ambient temperatures should be between +5°C to +30°C. It is not recommended to apply on windy, rainy and frost days.

## Consumption

For 1 liter fresh mortar, approximately 2,0 kg powder product needed. Recommended application thickness is min. 10 mm / max. 30 mm

Packaging: 25 kg kraft bag

Shelf Life: 12 months in original, unopened package.

**Storage:** Store in dry area between +5°C and +35°C. Protect from heat, freezing and direct sunlight.

**Cleanup Information:** Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

## GRADA YAPI KİMYASALLARI VE İNŞAAT MALZEMELERİ ÜRETİM SAN. TİC. A.Ş.

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## **Cautions / Limitations**

• Prepared material must be used within 40 minutes at +20°C. • Fine grade aggregate can be added to system, if needed more thickness surface. Amount of aggregate must not exceed half of GRADAGROUT 401 amount. Bear in mind that aggregate addition reduces cement performance • It may be harmful with skin contact. • Do not apply in freezing conditions or during precipitation. • Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry. • Do not use when air and surface temperatures are below +5°C and above +30°C.

## **Health and Safety**

Warning! Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person.

Wash hands thoroughly after handling. Wear protective clothing, gloves, eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations.

Keep container closed when not in use. Keep out of the reach of children.

**Limited Warranty:** This product is subject to a written limited warranty which can be obtained free of charge from GRADA Company. Please contact with technical service department for further information and support.



1020

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Çınardere Mah. Akan Sok. No:13/3 Kat:2

Pendik / İstanbul

TÜRKİYE 19

1020 - CPR - 40 60274

**DOP NO:** 0012

EN 1504-3:2005

**GRADAGROUT 401** 

Yüksek Mukavemetli Akışkan Grout Harcı

Tamir Methodu 3.1- 3.2 - 4.4 - 7.1- 7.2

(Polimer Katkılı Hidrolik Çimento)

Basınç Dayanımı	Sınıf R4
Yapışma Bağ Dayanımı	≥ 2Mpa
Sınırlandırılmış Büzülme/ Genleşme	UYGUN
Yangına Tepki	Sınıf A1
Tehlikeli Maddeler	Madde 5.4'e uygun







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