PRODUCT DATA



#### **Cebo Drill-Grout Plus**

## Description

Cebo Drill-Grout Plus is a hardening suspension for horizontal directional drilling operations. It hardens into a plastic, non permeable material and is therefore ideal to fill up annular spaces.

# Application/function

Stabilize annular spaces to avoid subsidence and water flow by filling up the complete annular space with a self hardening suspension.

## **Advantages**

- · Subsidence is avoided
- No erosion
- Steel pipes are protected against corrosion
- Can use standard mixing system
- Compatible with ground water as confirmed by the Hygiene Institut in Gelsenkirchen
- · Quick strength development

# **Typical properties**

Appearance	Powder
pH (standard suspension)	11

#### Typical results

Test	Test in accordance with:	33% suspension	35% suspension
Marsh funnel (initially)	DIN V 4126-100	47 s/l	55 s/l
Marsh funnel (after 4 h.)	API RP 13I	55 s/l	66 s/l
Yield point	API RP 13I	31 lb/100 ft <sup>2</sup>	44 lb/100 ft <sup>2</sup>
Specific gravity	API RP 13I	1190 kg/m <sup>3</sup>	1205 kg/m <sup>3</sup>
Shear strength after 7 days (20°C)	Vane shear tester T174	> 240 kPa	> 240 kPa
Shear strength after 21 days (20°C)	Vane shear tester T174	> 240 kPa	> 240 kPa
Shear strength after 28 days (20°C)	Vane shear tester T174	> 240 kPa	> 240 kPa

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**Recommended:** Use a standard mixing unit.

**Treatment:** Before adding, test the pH and the hardness of the water.

pH should be between 7 and 10 and hardness as low as possible. Add between 330 and 350 kg Cebo Drill-Grout Plus to 1 m<sup>3</sup> of water. **Caution:** Cebo Drill-Grout Plus needs to be used within 8 hours after

mixing.

**HDD applications:** Cebo Drill-Grout Plus is designed to be used at the same time as the

pipe is pulled in. In this way, Cebo Drill-Grout Plus will drive out the

existing slurry. Therefore it is advised to test the density of the suspension in the borehole before pulling in. This should not be higher than s.g. 1080 kg/m³. When higher, make a clean

run first.

Use a barrel reamer with 2 nozzles on the machine side and a minimum of 6 nozzles on the pipe side. This will help you to

replace the slurry with the Cebo Drill-Grout Plus.

**Volume:** The volume of the Cebo Drill-Grout Plus must be 15 % more than the

calculated volume to be sure that the drilling fluid is fully replaced

with Cebo Drill-Grout Plus.

## Packaging:

- 1050 kg packed in 25 kg bags on a pallet with shrink film
- 1000 kg big bags

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