### **1118 GROUT**

### (Unsanded Silica Fume Grout)

November, 2019 Page 1 of 3

### **PRODUCT**

TARGET® Unsanded Silica Fume Grout consists of accurately weighed portland cement, silica fume and special chemical admixtures. The product is designed for use as a flowable grout. In working temperature ranges of 5 °C to 35 °C (41 °F to 95 °F), the grout will have a slight expansion prior to final set. The grout contains no added chlorides or other admixtures that could aggravate corrosion of embedded steel.



### **USES**

TARGET Unsanded Silica Fume Grout is primarily designed for uses where a premium quality high flow grout that inhibits washout by water and has a very low permeability is required.

### Applications include:

- Soil tie back anchor grouting
- Grouting of fissures and cracks in rocks
- Grouting of unconsolidated preplaced aggregates
- Anchor bolt grouting
- · Repair of stable cracks in concrete
- Any area where there is a possibility of running water washing out the cement component in conventional grouts before they achieve final set
- Situations where extended working or setting times are required

### **ADVANTAGES**

- Contains no added chlorides or admixtures that could aggravate corrosion of embedded steel
- Inhibits washout
- Low permeability
- Very high flow grout for extended working times



# 1118 GROUT (UNSANDED SILICA FUME GROUT)

November, 2019 Page 2 of 3

## TYPICAL PROPERTIES OF TARGET 1118 GROUT at fluid consistency

(Corps of Engineers CRD-C62I and ASTM Standard C1107 test procedures)

PROPERTY	TYPICAL VALUE
FLOW Water used, litres/25 kg (55 lb) bag	25 seconds 9.5
EXPANSION, BEFORE SETTING. % volume	1.5 to 2.5
SETTING TIME	Initial 6
hours at 20 °C (68 °F)	Final 8
COMPRESSIVE STRENGTH	MPa (lb/in²)
at 24 hours	20 MPa (2900)
at 72 hours	35 MPa (5080)
at 7 days	50 MPa (7250)
at 28 days	60 MPa (8700)

### **PROCEDURES**

- 1. The grout is best mixed in a high-speed shear mixer such as a Jiffler mixer or equivalent.
- 2. Add the grout to clean water and mix to a uniform consistency. Water temperature should be 10 °C to 18 °C (50 °F to 65 °F).
- 3. The grout can be mixed to flowable or fluid consistencies, depending on the job application. The water content of the grout should be kept as low as possible, and not exceed 10.2 litres of water per 25 kg (55 lb) bag of TARGET Unsanded Silica Fume Grout.
- 4. Mix the grout continuously for at least 5 minutes before placing. If possible, the grout should be mixed continuously until placing is completed, but if this is not practical, a brief remixing prior to pumping or placement is adequate to overcome the effect of "thixotropic set" caused by the silica fume.
- 5. Place, using a grout pump or other established grouting procedures. The placement method will depend on the application and grout consistency.
- 6. In order to obtain full expansion of the grout in place, limit batch sizes to the amount of grout placement that can be completed within 1 hour.

TARGET

# 1118 GROUT (UNSANDED SILICA FUME GROUT)

November, 2019 Page 3 of 3

### **CAUTION**

- The grout is not recommended for heavy duty precision grouting of machinery base plates or crane rails unless adequate neoprene pads or equivalent vibration and energy absorbing materials are included in the design detail.
- The grout performs best when fully restrained or confined on all surfaces.
- Pours with least dimensions (thickness) in excess of 50 mm (2 inches) are not recommended.
- Ambient temperatures should be between 10 °C (50 °F) and 30 °C (86 °F).
   Cooler temperatures will retard the rate of strength gain, especially in flowable or fluid mixes. Foundation and bed plate temperatures should be kept above 5 °C (41 °F) and below 35 °C (95 °F) for at least 72 hours after grouting.

### **APPROXIMATE YIELD**

per 25 kg (55 lb) bag at fluid consistency

bags/m<sup>3</sup> 55 bags/yd<sup>3</sup> 42 litres/bag 18.4 ft<sup>3</sup>/bag 0.65

### **SPECIFICATION GUIDE**

Grout shall be TARGET Unsanded Silica Fume Grout or approved equivalent product meeting the requirements of US Corps of Engineers Specification CRD-C621 and ASTM Standard Specification C1107 for Non-Shrink Grout. The grout shall develop a compressive strength of not less than 48 MPa (7000 lb/in²) after 28 days when mixed and cured in accordance with the manufacturer's directions.

#### **PACKAGING**

TARGET Unsanded Silica Fume Grout is available in 25 kg (55 lb) bag 42 bags per pallet.

