



ARDEX CE 901

Ultra Flow PT Grout

Ultra-fluidity

Rapid strength gain

No plastic shrinkage

Extended working time – allows long distance pumping

No formation of hydrogen gas

Ideal for grouting of stressed cables, bars and anchorages



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Ultra Flow PT Grout

DESCRIPTION

ARDEX CE 901 Ultra Flow PT Grout is a high strength, aggregate-free cement grout. When mixed with water it forms a structural grout for grouting of post-tensioning ducts and other grouting applications. It is formulated using a blend of portland cement and special chemical additives to meet stringent requirements.

The use of unique blend of additives in ARDEX CE 901 stabilizes the cement particles and allows the grout to pump long distances without segregation.

RECOMMENDED USES

- Grouting of post tensioning cable ducts horizontally and vertically
- Grouting of small openings over long distance
- Soil and rock grouting
- High flow grouting application

ADVANTAGES

- High bonding strength to tendons
- Ultra-fluidity
- Full encapsulation of tendons and wire strands
- Chloride free
- No generation of hydrogen gas
- No bleeding and sedimentation of cement particles
- Low permeability
- Corrosion protection

PREPARATION

Check to ensure the pump lines and grout lines are free from blockages by flushing out with potable water. The ducts should be checked by flushing out with air or other approved means to remove excess water from the pump and grout lines. Check that all connections are sealed prior to grouting.

MIXING

The grout can be mixed to flowable or fluid consistencies, depending on the job application. Each 25kg bag of ARDEX CE 901 will require approximately 7.8 – 8.8L of clean potable water. Pre-dampen the inside of the clean mixer and remove any excess water. Measure approximately 90% of the required water into a high shear mixer and add slowly the entire contents of the bag

while mixing. Mix for approximately 3 – 4 minutes. Then add the remaining water and mix for about 2 – 3 minutes or until it is fully homogenized. The water content of the grout should be kept as low as possible, and not exceed the maximum recommended water ratio of 8.8 L of water per 25 kg. It is important to pump the grout in a steady flow while the grout is agitated continuously to avoid gelling.

Mix only the amount of material that can be placed within 60 minutes.

APPLICATION

Connect the grout lines to the duct inlet tubes and commence pumping until the grout flows out from the adjacent tube. Lock the inlet tube to prevent further outflow of the grout and disconnect pump pressure line and proceed to the next inlet tube.

PAY ATTENTION TO THE FOLLOWING:

1. Do not over-water. This can lead to segregation, shrinkage and strength reduction.
2. Store bags and water reservoir for mixing in a shaded or conditioned space. Cool water and powder can greatly extend the working time in hot conditions.
3. Keep unrestrained area to the minimum, the grout performs best when fully restrained.

PACKAGING

ARDEX CE 901 is packed in polylined paper sacks – net weight 25kg

STORAGE AND SHELF LIFE

ARDEX CE 901 has a shelf life of 12 months when stored in the original, unopened packaging in a dry place at 23°C and 50% relative humidity.

CLEAN UP

All grouting equipment shall be thoroughly washed with clean water after grouting operations for that day are completed.

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TECHNICAL DATA

Mixing Ratio	7.8 – 8.8L of water per 25kg bag
Coverage	25kg of powder yields 15.2L of grout @ 31% water 16.2L of grout @ 33.5% water 16.9L of grout @ 35% water 1m ³ of grout requires 62bags of powder @ 33.5% water

Characteristics	Test Method	Test Results
Sieve Test	BS EN 445 : 2007	No lumps
Compressive Strength 1 day 7 days 28 days	BS EN 12190 : 1999	> 35 Mpa > 70 Mpa > 90 Mpa
Fluidity Test Initial Final @ 30 min	BS EN 445 : 2007	$t_0 \leq 25s$ $t_{30} \leq 25s$ and $1.2t_0 \geq t_{30} \geq 0.8$
Wick Induced Test Volume Change Bleeding	BS EN 445 : 2007	0 to + 0.3% < 0.3%
Chloride Content	BS EN 1015-17 : 2000	0.02%
Sedimentation Test Density variation	Inhouse Testing	< 0.6%
Fresh Density	BS EN 1015-17-2000	2000 ± 100kg /m ³
Setting Time	BS EN 445 : 2007	Initial Set > 180 min Final Set < 480 min

Technical data according to ARDEX Quality Standards. All data based on a partial, in-lab mix at 23±2°C and RH 55±10%, water powder ratio 0.335

SAFETY PRECAUTIONS

ARDEX CE 901 should not come into contact with the skin and eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Wear suitable gloves, goggles and other protective clothing. The use of barrier creams can provide additional skin protection. When working in confined areas suitable respiratory equipment must be used. In case of contact with skin, rinse with plenty of clean water then wash with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water, and then seek medical attention without delay. If swallowed, seek medical attention straight away, do not induce vomiting. The Safety Datasheet (SDS) is available at www.ardex-quickseal.com

DISCLAIMER

The technical datasheets are based on the latest information and given in good faith and represent the best of our knowledge and experience at the time of printing. They are primarily offered for user's consideration and evaluation. It is the responsibility of the user to conduct their own tests to validate the suitability of the products. It is also the responsibility of the user to ensure that the products are used and handled correctly and in accordance with any applicable standards, the product instructions and recommendations and only for the uses they are intended. As we have no control over site conditions and the execution of the work, we accept no liability for any loss or damage which may rise as a result thereof. We also reserve the right to update

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the information at any time without prior notice to you to reflect our ongoing research and development program.

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