



Arina-grout SCA 495

Shrinkage compensating admixture with high water reducing effect

Introduction:

Arina-grout SCA 495 is powder form admixture used to compensate natural shrinkage of cement. Also contains plasticizer which helps to produce concrete or other cement based product with less water-cement ratio, hence increasing mechanical strengths. Major expansion effect appears before setting time, but stabilization property of product helps to prevent shrinkage in later ages.

Where to use:

Arina-grout SCA 495 can be used for producing grout mortars at job site. It can also be used for production of injection grouts or shrinkage compensated concrete. The product is mainly used wherever shrinkage compensation of cement based products is the goal such as:

- Bonding new concrete to existed substrate in strengthening of structures.
- Fixing machinery's chassis or duct grouting in post tensioning applications
- Structural filling of holes and cavities in concrete.
- Filling spaces under base plates.
- Anchorage and fixing of bolts and dowel bars.

Technical information:

Appearance	Brown powder
Dosage	500 gr. /100 kg. Of cement
Chloride content	Nil
Nitrate content	Nil
Specific gravity	1.3 kg. / Liter
Flash point	Not flammable

Advantages:

- Easy to mix and use.
- Low odor and user friendly.
- Provides excellent flow-ability when mixed with concrete.
- Compensates shrinkage.
- Will not corrode reinforcement.
- Develops early strengths.

Expansion:

When adding **Arina-grout SCA 495** to concrete or grout mix, maximum expansion occurs during 1 to 2.5 hours after mixing, which depends on environmental temperature, water-cement ratio and type of cement used. The expansion rate is between 2% to 3% in cement based slurries, and 1% to 1.5% in concrete or sand-cement mortars.

How to use:

Arina-grout SCA 495 can be pre-mixed with dry materials such as cement or concrete before adding water, in this case a suitable powder mixer is required to ensure proper mixing. It can also be added to wet material while mixing process. to achieve maximum benefit from this product, pour measured water to the mixer and add cement while the mixer is rotating, continuing mixing till a homogeneous paste be achieved, add **Arina-grout SCA 495** to the cement paste and



Arina Polymer

شرکت آرینا پلیمر

تولید کننده انواع اپوکسی های ساختمانی

continue mixing for further 3 minutes, finally add aggregates (if existed in mix design) and mix it for 2 more minutes. Please note that excessive mixing results in less expansion.

Dosage:

Arina-grout SCA 495 should be dosed in rate of 0.5% of cement content as starting point, actual dosage will be determined for each job by trial. It is compatible with different types of cements, but expansion effect may differ in various cement types. Over dosing will result in more expansion as well as more fluidity.

Please note that water cement ratio in mix designs containing this product should be calculated less than normal mixes and more water content may result is segregation and bleeding.

Cleaning:

All tools and equipment should be washed with water after completion of each job or before break time. Cured material can only be removed mechanically.

Storage / Shelf life:

Store out of direct sunlight on pallets, and protect from compaction, extreme heat and rain fall. The shelf life for originally unopened package is 12 months from date of production.

Packaging:

Arina-grout SCA 495 is supplied in 500 Gr. Pails and 20 Kg. PP bags.

Safety precautions:

Arina-grout SCA 495 is not dangerous but like other chemical materials, it may cause skin irritation. Use personal safety devices such as gloves and goggles. If contacted with eyes or mucous membrane, wash with plenty of water immediately and seek medical attention.