

High performance for self compacting concrete

DESCRIPTION

TECH-VISCO-SCC, is developed for the ready mixed concrete industry a super plasticizer based on polycarboxylic technology where high early and ultimate concrete performance with self compacting properties is need.

STANDARDS

ASTM C-494 Typ F ; TS EN 934-2

FIELD OF APPLICATION

TECHNO-VISCO-SCC can be used on all types of high quality concrete where self compacting properties with high mechanical strength and significantly lower w/c ratio is need.

Due to it's high quality characteristics, TECH-VISCO-SCC is particularly indicated for use in ready- mixed concrete transported by mixer trucks where work and climate conditions require workability retention.

ADVANTAGES

TECH-VISCO-SCC is a carboxylic ether polymer based super plasticizer and within a dosage range from 0.8 – 2.0 %, the following can be obtained;

- * Concrete with an improved w/c ratio (water reduction of 25 – 40 %)
- * Waterproofing concrete.
- * Non segregation, fluid, plastic concrete without bleeding.
- * Slump – workability retention.
- * Self compacting concrete.
- * Homogeneous and cohesive concrete.
- * Easily pumped concrete with good workability and with good finishing.
- * Durable and highly impermeable concrete.
- * Improved properties of fresh and hardened concrete.
- * Concrete with high early and ultimate strengths.

COMPATIBILITY

TECH-VISCO-SCC is compatible with the following;

- * All Portland and other types of cement in accordance with ASTM standards.
- * Air entraining admixtures.
- * Silica fume..
- * Fly ash.
- * Polypropylene and steel fibers.

Do not use with other types of concrete admixtuers.

MECHANICAL STRENGTHS

Compared to a concrete without the admixture, the use of TECH-VISCO-SCC in concrete will result in an increase in the mechanical strength, in proportion with water reduction, in some cases, by 100%.

With the use of TECH-VISCO-SCC, high ultimate mechanical strengths will be evidenced.

Because of the reduction in the water/cement ratio, increased resistance and durability, lower shrinkage and permeability will be obtained.

DOSAGE AND USE

The dosage of TECH-VISCO-SCC is 0.8 – 1.5 kg for every 100 kg of cement, to be added in mixer with the last mix water. (after 70% introduction of the mix water)

The addition of admixture on dry aggregates and cement is not recommended since it lowers the plasticizing and water reducing effect.

WORKABILITY

Workability time after the use of TECH-VISCO-SCC in the concrete depends on the applied dosage, type and dosage of cement and aggregates and ambient temperature.

In general, the extended workability time after the addition of the admixture, is about 40 – 120 minutes at 20°C.

The loss of workability is gradual and only practical site tests will specify the workability.

PRECAUTIONS

Use gloves and avoid contact with eyes and skin. Consult a physician if contact with eyes and skin.

PACKING AND STORAGE

TECH-VISCO-SCC is available in 250 kg drums, 1200 kg plastic cubitainers. If stored in between +5 °C / +25 °C in it's original packaging shelf life is more than 1 year.