

GLENIUM[®] ACE 30

Admixture Controlled Energy Essential component of Zero Energy system. A chloride free, new generation of polycarboxylic ether superplasticizer. In synergy with Smart Dynamic Concrete (SDC), it optimises the production of precast concrete structural elements. Suitable during the summer. Meets the requirements of EN 934 – 2 and ASTM C494 type A and F.

Description and field of application

GLENIUM[®] ACE 30 is an innovative second generation of polycarboxylic ether polymers superplasticizer. The particular molecular configuration of GLENIUM[®] ACE 30 accelerates the cement hydration. Rapid adsorption of the molecule onto the cement particles, combined with an efficient dispersion effect, exposes increased surface of the cement grains to react with water. As a result of this effect, it is possible to obtain earlier development of the heat of hydration, rapid development of the hydration products and, as a consequence, higher strengths at very early age.

GLENIUM[®] ACE 30 is recommended for use at ambient temperature above 15°C.

GLENIUM[®] ACE 30 may be used in combination with RheoMATRIX for producing Smart Dynamic Concrete (SDC). The technology produces advanced self compacting concrete, without the aid of vibration. For economic, ecological and ergonomic ready-mix / precast concrete production.

Benefits

GLENIUM[®] ACE 30 offers the following benefits for the precast concrete industry to:

- Produce Smart Dynamic Concrete.
- Optimize the curing cycles by reducing curing time or curing temperature

- Eliminate the heat curing
- Eliminate the energy required for placing and compaction and curing (ZERO ENERGY)
- Increase productivity
- Improve surface appearance
- Produce durable precast concrete elements as per EN 206-1
- As compared to the traditional superplasticizers, the engineering properties such as early and ultimate compressive and flexural strengths, bond to steel, modulus of elasticity, shrinkage, creep, and impermeability are improved.

Packing and storage

GLENIUM[®] ACE 30 is available in 208 litre drums or in bulk.

GLENIUM[®] ACE 30 must be stored in a place where the temperature does not drop below 5°C. In case the product freezes, bring the temperature of the product to 30°C and remix.

Standards

EN 934-2 Tables 3.1 and 3.2

GLENIUM[®] ACE 30

Compatibility

GLENIUM ACE 30 is compatible and recommended for use with:

- RheoMATRIX to modify the viscosity of SCC.
- MICRO-AIR, air entraining admixture, to improve freeze-thaw resistance (exposure class XF1 to XF4, EN 206-1)
- RHEOFINISH, demoulding agent for easy formwork removal and improved finish.
- MASTERKURE, curing compound for highly efficient water retention and friendly use.

GLENIUM ACE 30 is **not compatible** with all admixtures of RHEOBUILD series.

Dosage rate

The normally recommended dosage rate is 0.5 to 1.0 liters per 100 kg of the binder and any material (fines or fillers) passing the 0.1 mm sieve used for producing Smart Dynamic Concrete.

Other dosages may be used in special cases according to specific job site conditions. In this case please consult our Technical Services Department.

Directions for use

GLENIUM[®] ACE 30 is a liquid admixture to be added to the concrete during the mixing process. The best results are obtained when the admixture is added after all the other components are already in the mixer and after the addition of at least 80% of the total water. The water content is adjusted to obtain the desired consistence or workability.

Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality and care

All products originating from BASF's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

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