

GLENIUM® ACE 303 P

Admixture Controlled Energy Essential component of Zero Energy system. A chloride free, new generation of polycarboxylic ether superplasticizer. In synergy with Rheodynamic concrete, 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 303 P is an innovative second generation of polycarboxylic ether polymers superplasticizer. The particular molecular configuration of GLENIUM ACE 303 P 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 303 P is suitable for making precast concrete elements with Rheoplastic concrete having fluid consistence, no segregation and low water cement ratio and, consequently, high early and long-term strengths. GLENIUM ACE 303 P may be used in combination with GLENIUM STREAM admixtures for producing Rheodynamic concrete, capable of self-compaction, even in the presence of dense reinforcement, without the aid of vibration, for making precast elements.

GLENIUM ACE 303 P is recommended for use at ambient temperature above 15°C.

ZERO ENERGY SYSTEM:

Zero Energy System is based on a combination of the avant-garde admixture GLENIUM ACE 303 P and the innovative technology of Rheodynamic concrete. The Zero Energy System has been developed to help the precast concrete producer to rationalize his production process and save on energy costs combined with improved quality of the product and the working conditions.

Benefits

GLENIUM ACE 303 P offers the following benefits for the precast concrete industry to:

- Produce Rheoplastic and Rheodynamic concrete having a low water cement ratio
- 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 303 P is available in 220 kg. drums or in bulk.

GLENIUM ACE 303 P 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.