

MasterGlenium ACE 35

High range water reducing / superplasticising admixture

Material Description

MasterGlenium ACE 35 is an innovative second generation of polycarboxylic ether polymers superplasticiser. The particular molecular configuration of **MasterGlenium ACE 35** accelerates the cement hydration. Rapid absorption 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 a very early age. **MasterGlenium ACE 35** meets AS 1478 for Type HWR admixtures. Complies with EN934 Part 2 Table 3 'High Range Water Reducing/Superplasticizing'..

Areas of Application

- **MasterGlenium ACE 35** is suitable for making precast concrete elements at all workabilities including Rheoplastic concrete having fluid consistence, no segregation and low water cement ratio and, consequently, high early and long term strengths.
- **MasterGlenium ACE 35** may be used in combination with MasterGlenium 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.
- **MasterGlenium ACE 35** performs best when the concrete temperature is at 15°C or above.

Characteristics and Benefits

MasterGlenium ACE 35 offers the following benefits for the precast concrete industry to:

- Produce Rheoplastic and Rheodynamic concrete having a low water cement ratio
- Optimise the curing cycles by reducing curing time or curing temperature
- Eliminate the heat curing
- Eliminate the energy required for placing, compaction and curing (Zero Energy)

- Increase productivity/reduction in cycle times
- Improve surface appearance
- Produce durable precast concrete elements as per EN206-1
- As compared to the traditional superplasticisers, the engineering properties such as early and ultimate compressive and flexural strengths, bond to steel, modulus of elasticity, shrinkage, creep and impermeability

Properties

SG	1.064
pH	6.5 ± 1.0
Alkali (Na ₂ O Equivalent) g/L	9.58
Chloride %	≥ 0.05

Dosage

The normally recommended dosage rate is:
 By Volume – 0.2 to 1.5 litres per 100kg of cement (binder) and any material (fines of fillers) passing the 0.1 mm sieve used for producing Rheodynamic concrete. Other dosages may be used in special cases according to specific job site conditions. In this case consult your Master Builders Solutions Technical Sakes Representative.

Application

MasterGlenium ACE 35 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 at least 70% of the added water and after all the other components are already in the mixer.

Compatibility

MasterGlenium ACE 35 is not compatible with admixtures containing β-naphthalene sulphonate condensates (BNS). **MasterGlenium ACE 35** can be used in combination with other Master Builders Solutions admixtures to achieve cost effective and customised performance. It can also be used effectively in



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combination with non-chloride accelerators such as MasterSet AC 534 to reduce set times for cold weather concreting. Each admixture should be dispensed separately into the mix to ensure proper dispersion.

Care should be taken when used in conjunction with an air entraining agent (AEA) as there may be a synergistic effect due to increase in the air content.

Packaging

MasterGlenium ACE 35 is available in bulk, 1000 litre IBCs and 20 litre cubes.

Storage & Shelf Life

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight. Protect from temperatures below: 5 °C. The packed product is destroyed at low temperatures or by frost. Protect from temperatures above: 45 °C The packed product will be damaged by high temperatures.

MasterGlenium ACE 35 has a shelf life of 12 months.

MasterGlenium ACE 35 should be recirculated before use.

Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

Disclaimer

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STATEMENT OF RESPONSIBILITY

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