

MasterGlenium SKY 8100

High range water reducing / superplasticising admixture

Material Description

MasterGlenium SKY 8100 is an innovative second generation polycarboxylic ether polymer superplasticiser with improved slump retention. The particular molecular configuration of **MasterGlenium SKY 8100** accelerates the cement hydration. Rapid absorption of the molecule onto the cement particles, combined with an efficient dispersion effect maintains workability yet 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. Complies with ASI 478. I-2000 Type HWR High Range Water-reducing.

Characteristics and Benefits

- **MasterGlenium SKY 8100** is suitable for making precast concrete elements having a fluid consistence, no segregation, a low water/ binder ratio and, consequently, high early and long term strengths.
- **MasterGlenium SKY 8100** may be used in combination with other Master Builders Solutions admixtures for producing Super Workable and Self Compacting Concrete, even in the presence of dense reinforcement, without the aid of vibration, for making precast elements.

Characteristics and Benefits

MasterGlenium SKY 8100 offers the following benefits for the precast concrete industry to:

- Produce concrete having low water/cement or water/binder ratios
- Optimise curing cycles by reducing curing time or curing temperature
- Eliminate heat curing
- Increase productivity/reduction in cycle times
- Improve surface appearance
- Produce durable precast concrete elements
- Improved engineering properties, compared to traditional superplasticisers, such as early and ultimate compressive and flexural strengths, shrinkage and permeability

Properties

Appearance: Brown liquid.	
SG	1.069 ± 0.02
pH	7.00 ± 1.0
NVM % w/w	30.0 ± 2.0
Alkali (Na ₂ O equivalent) % w/w	0.5 ± 0.1
Chloride ion (Cl ⁻)% w/w	0.005 ± 0.001
Sulphate (SO ₄) % w/w	0.05 ± 0.02

Dosage

The normal recommended dosage rate is 0.2 to 0.6 litres per 100kg of cement (binder) and any material passing the 0.15mm sieve (fines from aggregates or fillers) used for producing Super Workable and Self Compacting Concrete. Other dosages may be used in special cases according to specific job site conditions. In this case consult your Master Builders Solutions Technical Sales Representative.

Application

MasterGlenium SKY 8100 is a liquid admixture normally added to concrete during the mixing process either at the batch plant or on site.

At the batch plant, **MasterGlenium SKY 8100** may be added with the initial batch water, however, 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. When added at site, mix for a minimum of 2 minutes before discharging.

Avoid adding **MasterGlenium SKY 8100** to dry materials. Concrete which has lost slump may be re-tempered with **MasterGlenium SKY 8100** provided initial setting has not started.

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Compatibility

MasterGlenium SKY 8100 is compatible with most Master Builders Solutions admixtures providing they are added separately to the mix.

MasterGlenium SKY 8100 is compatible with the Master Builders Solutions range of Viscosity Modifying Admixtures (VMAs) and Pump Aids often used with High Strength and Super Workable Concrete.

MasterGlenium SKY 8100 is not compatible with admixtures containing Sulphonated Naphthalene Formaldehyde Condensate.

MasterGlenium SKY 8100 may have a synergistic effect with AEA significantly increasing the amount of entrained air. Trials are recommended before using this combination.

Packaging

MasterGlenium SKY 8100 is available in bulk, 1 000 litre IBCs and 20 litre cubes.

Storage & Shelf Life

Store only in the original container in a cool, dry and well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

MasterGlenium SKY 8100 has a shelf life of 12 months.

MasterGlenium SKY 8100 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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