

MasterGlenium[®] SKY 8611

Superplasticising and viscosity modifying admixture for Smart Dynamic Concrete

DESCRIPTION

MasterGlenium SKY 8611 is a polycarboxylate ether (PCE) based superplasticizer to provide low fines self-consolidating concrete for everyday use. The superplasticizer contains an essential component MasterMatrix[®] which is a breakthrough and revolutionary viscosity modifying admixture (VMA) from BASF. This unique concept of low fines self-consolidating concrete from BASF is known as Smart Dynamic Concrete (SDC).

MasterGlenium SKY 8611 offers a quantum leap in concrete robustness allowing for flowability and stability of concrete at the same time. The self consolidating nature of Smart Dynamic Concrete requires minimal vibration making the process of concrete placement fast and effective.

MasterGlenium SKY 8611 is free of added chloride and is compatible with all cements meeting ASTM standards.

MECHANISM

MasterGlenium SKY 8611 is built upon BASF-proprietary, intelligent (smart) polymers which interact among themselves and with water molecules to generate a water envelope that produces a highly stabilized cement paste. It is a unique 2-in-1 admixture with MasterMatrix inside based on the principle of intelligent, self organizing molecules.

A combination of viscosity modifying agent with a tailor-made polycarboxylate ether, **MasterGlenium SKY 8611** improves cement dispersion to give a matrix-like structure which distributes the liquid cement evenly and enhances segregation resistance. **MasterGlenium SKY 8611** is able to substantially increase the plastic viscosity of concrete, while maintaining a limited increase in the yield value thereby reducing its sensitivity to water variation.

RECOMMENDED USES

- Ready-mix concrete and site mixing concrete
- Reinforced concrete and plain concrete
- Impermeable concrete
- Mass concrete
- Pumped concrete

FEATURES AND BENEFITS

- **High water reduction** – High early and ultimate strengths. Low permeability, high durability concrete.
- **High flowability** – Ease of placing and compaction. No segregation and bleeding.
- **Superior slump retention** – Easy to produce and transport, reduced retreat rate.
- **Low shrinkage and creep** – Improve dimensional stability. Reduced risk of shrinkage.
- **Good cohesion** – Ease of pump. Reduce pumping costs.
- **Excellent workability** – Good surface appearance.
- **High elastic modulus** – Superior load bearing ability.

APPLICATION

MasterGlenium SKY 8611 can be added into water and wet concrete. Not recommended for direct addition into dry concrete.

DOSAGE

Dosage rate for **MasterGlenium SKY 8611** depends on the mix design, ambient conditions and degree of water reduction and workability required. Generally, for concrete with water/cement ratios between 0.45 and 0.55, the typical dosage is 800 - 1500ml per 100kg of cementitious materials.

Other dosages may also be used depending on specific working conditions. Trial mixes should be made with job materials to determine the optimum dosage required for a specified job requirement.

Higher dosage might be needed for higher percentage of clinker replacement or less reactive cement.

PACKAGING

MasterGlenium SKY 8611 is available in bulk and 205L drums.

MasterGlenium® SKY 8611

SHELF LIFE

MasterGlenium SKY 8611 can be stored for 12 months if stored at a temperature above 0°C and in tightly sealed original containers. If frozen, thaw it and completely reconstitute by mild agitation. Do not use compressed air.

PRECAUTIONS

Health: MasterGlenium SKY 8611 does not contain any hazardous substances requiring labelling.

It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc.

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

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NOTE

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Master Builders Solutions Malaysia Sdn Bhd
No. 8, Jalan Keluli 2, Kawasan Perindustrian Bukit Raja,
41050 Klang, Selangor, Malaysia.
Tel : +603 3082 1000
www.master-builders-solutions.com/en-asiapacific