

MasterGlenium[®] 3005

Polycarboxylic ether-based superplasticizer for the production of high quality ready-mix concrete

DESCRIPTION

MasterGlenium[®] 3005 is an innovative latest generation superplasticizer based on polycarboxylic ether (PCE) polymers and is specially engineered for ready-mix concrete.

MasterGlenium[®] 3005 is differentiated from conventional superplasticisers, such as those based on sulphonated naphthalene formaldehyde condensate in that it is based on a unique carboxylic ether polymer with long lateral chains. This greatly improves cement dispersion. At the start of the mixing process the same electrostatic dispersion occurs but the presence of the lateral chains, linked to the polymer backbone, generate a steric hindrance which stabilises the cement particles capacity to separate and disperse. This mechanism provides flowable concrete with greatly reduced water demand.

FIELDS OF APPLICATION

MasterGlenium[®] 3005 is used for the production of high quality ready-mix concrete.

FEATURES AND BENEFITS

THE READY- MIXPRODUCER:

- Capability of delivering high performance concrete at any time to the job site in place
- Production of a concrete with low water cement ratios with excellent workability retention properties.
- Single product for many application needs

THE CONTRACTOR / APPLICATOR:

- Easier placing and faster strength development
- Improved concrete surfaces

THE ENGINEER:

- Insurance that concrete meets original specification
- High quality durable concrete

PACKAGING

MasterGlenium[®] 3005 is supplied in 1,000 litre containers or in bulk.

TYPICAL PROPERTIES*

Appearance	Brown coloured liquid
Specific gravity @ 25°C	1.06 ± 0.02
pH value	4.5 – 6.5
Chloride content	"chloride-free" to EN 934-2

The occurrence of a surface layer with **MasterGlenium[®] 3005** is normal and will have no effect on the performance of the product.

STANDARDS

ASTM C-494 Type F&G
BS EN 934-2

APPLICATION PROCEDURE

DOSAGE

The normally recommended dosage rate of **MasterGlenium[®] 3005** is 0.8 to 3.0 litre per 100kg of total cementitious material. Other dosages may be recommended in special cases according to the specific site conditions. In this case please consult our Technical Services Department for advice.

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MIXING

MasterGlenium[®] 3005 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if

MasterGlenium[®] 3005 is poured into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

COMPATIBILITY

MasterGlenium[®] 3005 is not compatible with **MasterRheobuild[®]** superplasticizers.

MasterGlenium[®] 3005 is suitable for mixes containing:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- GGBS (ground granulated blast furnaceslag)

STORAGE

MasterGlenium[®] 3005 should be stored out of direct sunlight and protected from extremes of temperature. The shelf life is 1 year when stored as above.

HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. **MasterGlenium[®] 118** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

SAFETY PRECAUTIONS

MasterGlenium[®] 3005 contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

NOTE

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

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

QUALITY AND CARE

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health

safety management systems described in the ISO 9001:2015,
ISO 14001:2015 & OHSAS 18001:2007 standards.

* Properties listed are based on laboratory controlled tests.

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