

MasterGlenium[®] 3889KE1

Polycarboxylic ether based superplasticizer for the production of high quality ready-mix concrete with excellent workability retention properties.

MATERIAL DESCRIPTION

MasterGlenium 3889KE1 is an innovative latest generation superplasticizer based on polycarboxylic ether (PCE) polymers, and is specially engineered for ready-mix concrete where the consistency of aggregates may be variable.

MasterGlenium 3889KE1 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 3889KE1 is used for the production of high quality ready-mix concrete.

FEATURES AND BENEFITS

The ready-mix producer:

- 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

TYPICAL PROPERTIES*

Properties listed are for guidance and are not a guarantee of performance.

Appearance	Whitish to light brown clear to cloudy liquid
Specific gravity	1.082 at 25°C
pH	5-7
Chloride content	"chloride-free" to EN 934-2

DOSAGE

The normally recommended dosage rate of **MasterGlenium 3889KE1** is 0.60 to 2.00 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.

COMPATIBILITIES

MasterGlenium 3889KE1 is not compatible with **MasterRheobuild** superplasticizers.

MasterGlenium 3889KE1 is suitable for mixes containing:

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

MasterGlenium 3889KE1 can be used in combination with air entraining admixtures such as **MasterAir 100**.

PACKAGING

MasterGlenium 3889KE1 is supplied in 210 litre drums, 1,000 litre containers or in bulk.

STANDARD

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

MIXING

MasterGlenium 3889KE1 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterGlenium 3889KE1** 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.

MasterGlenium[®] 3889KE1

Polycarboxylic ether based superplasticizer for the production of high quality ready-mix concrete with excellent workability retention properties.

STORAGE

MasterGlenium 3889KE1 should be stored in unopened containers or bulk tanks to protect from extremes of temperature.

The shelf life is 1 year when stored as above. The occurrence of a surface layer with **MasterGlenium3889** is normal and will have no effect on the performance of the product..

HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. MasterGlenium 3889KE1 is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

SAFETY PRECAUTIONS

MasterGlenium 3889KE1 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 MBS representative.

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

* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC-Group in many countries.

QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled tests.

DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions Kenya Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.