

# MasterGlenium 3251

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

## MATERIAL DESCRIPTION

**MasterGlenium 3251** is an innovative second generation superplasticizer based on polycarboxylic ether (PCE) polymers and is specially engineered for ready-mixed concrete.

**MasterGlenium 3251** 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.

## RECOMMENDED USE

**MasterGlenium 3251** is used for the production of high quality ready-mixed concrete.

## FEURURES AND BENEFITS

### For 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

### For the Contractor / Applicator:

- Easier placing and faster strength development
- Improved concrete surfaces
- Guarantee to place the same concrete as specified and ordered from ready-mix plant

### For the Engineer:

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

## PACKAGING

**MasterGlenium 3251** is available in 1000 litre IBC's.

## TYPICAL PROPERTIES\*

Appearance	Brownish Liquid
Specific gravity @25°C	1.065 - 1.085
pH value	4.5 – 6.5
Chloride Content	“chloride-free” to EN 934-2

The occurrence of a surface layer with **MasterGlenium 3251** is normal and will have no effect on the performance of the product.

## DOSAGE

The normally recommended dosage rate of **MasterGlenium 3251** is 0.5 to 1.5 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.

## MIXING

**MasterGlenium 3251** is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterGlenium 3251** 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 3251** is not compatible with MasterRheobuild superplasticizers.

**MasterGlenium 3251** is suitable for mixes containing:

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

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## STORAGE / SHELF LIFE

**MasterGlenium 3251** should be stored out of direct sunlight and protected from extremes of temperature. The shelf life is 12 months when stored as above.

## HANDLING & TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. **MasterGlenium 3251** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

## PRECAUTIONS

**MasterGlenium 3251** contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

## NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

## QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd 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.

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