

# MasterGlenium® 112

**New polycarboxylic ether superplasticizer for the production of high quality ready-mix concrete with low water cement ratio and exceptional workability**

## DESCRIPTION

**MasterGlenium 112** is an innovative latest generation superplasticizer based on polycarboxylic ether (PCE) polymers, and is specially engineered for ready-mix concrete.

**MasterGlenium 112** is differentiated from conventional superplasticisers, such as those based on sulphonated melamine and naphthalene formaldehyde condensates 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 112** is used for the production of high quality ready-mix concrete.

## FEATURES AND BENEFITS

**MasterGlenium 112** offers the following 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 without loss of workability
- 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 112** is supplied in 210 litre drums, 1,000 litre containers or in bulk.

## TYPICAL PROPERTIES\*

|                         |                                        |
|-------------------------|----------------------------------------|
| Appearance              | Clear to whitish to light brown liquid |
| Specific gravity @ 25°C | 1.060                                  |
| pH value                | 6.0                                    |
| Chloride content        | "chloride-free" to EN 934              |

## STANDARDS

ASTM C-494 Type F&G  
ASTM C-1017 Type I & II  
EN 934-2, Tables 11.1 and 11.2

## APPLICATION PROCEDURE

## DOSAGE

The normally recommended dosage rate of **MasterGlenium 112** is 0.8 to 2.0 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.

## MIXING

**MasterGlenium 112** is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterGlenium 112** 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.

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## COMPATIBILITY

**MasterGlenium 112** is not compatible with **MasterRheobuild** superplasticizers.

**MasterGlenium 112** is suitable for mixes containing:

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

## STORAGE

**MasterGlenium 112** should be stored in closed containers or storage tanks to protect from evaporation and extreme temperatures. The shelf life is 1 year when stored as above.

The occurrence of a slight surface layer with **MasterGlenium 112** 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 112** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

## SAFETY PRECAUTIONS

**MasterGlenium 112** 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 BASF representative.

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

## QUALITY AND CARE

All products originating from BASF's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

\* Properties listed are based on laboratory controlled tests.

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## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF 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.

## NOTE

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