

# MasterGlenium 3257

New generation robust Poly Carboxylate Ether (PCE) based water reducing admixture.

## MATERIAL DESCRIPTION

**MasterGlenium 3257** is a robust and economical water reducing admixture based on a specially formulated modification of the latest polycarboxylate ether chemistry from Master Builders Solutions. The product has been primarily developed for all types of normal and specialty concrete classes in the premix, precast and in situ concrete within the target slumps up to 120 mm, providing workable and cohesive mixes with less water.

**MasterGlenium 3257** has been specifically developed to enhance overall optimum performance in terms of water reduction, slump retention, compressive strengths & superior mix rheology, while maintaining control on extension of set retardation. **MasterGlenium 3280** is ideally “robust” in lean concrete mixes and in concrete that uses manufactured sand and recycled materials.

**MasterGlenium 3257** is chloride free and is compatible with all main types of cements and supplementary cementitious materials. **MasterGlenium 3257** conforms to AS 1478 Type WR.

## RECOMMENDED USES

**MasterGlenium 3257** is recommended for:

- All types of concrete where a non-chloride water reducing admixture is required. E.g. foundations, slabs, driveways, floor slabs, etc.
- Applications where good rheology, easier screeding and finishing are required for pumped and conventionally placed concrete.
- A combination of water reduction and workability in concrete mixes.

## FEATURES AND BENEFITS

- Efficient dispersion of binders in ordinary concrete mixes.
- Improved workability retention at higher temperatures.
- Improved pump operating pressures.
- Greater cohesion control of lean mixes.
- Normal setting characteristics under cool conditions (i.e. winter in combination with accelerators) allowing earlier finishing of slabs.
- Reduced water content for a given workability.

A new, unique mechanism of action using the polycarboxylate ether (PCE) chemistry in **MasterGlenium**

**3257** improve the effectiveness of cement dispersion coupled with rheology improvement to effect improved hydration.

With this admixture, the polymers coat the cement grains at the start of the mixing process preventing flocculation of the binder. The negative charges on the cement particle surfaces help dispersion through electrical repulsion. This electrostatic mechanism causes the cement paste to disperse and helps to reduce mixing water to obtain a given concrete workability.

**MasterGlenium 3257** has a different chemical structure from the traditional water reducers. It is based on the latest generation of carboxylic ether polymer technology from Master Builders Solutions, which is designed to offer the concrete producer a more robust, versatile & consistent performing admixture.

## TYPICAL PROPERTIES\*

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

Appearance	Clear yellowish liquid
Specific gravity @25°C	1.060 -1.080
pH value	8.0 – 11.0
Chloride Content	<0.05%

## DOSAGE

**MasterGlenium 3257** is a neutral set versatile admixture with a dose rate between 500 and 1500ml / 100 kg of cementitious material. An increase in the above dose rate may result in increased water reduction, workability and/or set time and possible improved pumpability and rheology, however, this is dependent on mix design characteristics.

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.

## COMPATIBILITY

**MasterGlenium 3257** is not compatible with admixtures containing  $\beta$ -naphthalene sulfonate condensates (BNS).

**MasterGlenium 3257** is compatible with all air-entraining concrete admixtures, however the dosage of air-

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entraining agent when added with **MasterGlenium 3257** may need to be altered to achieve required air-entrainment.

Initial lab and field trials are recommended to verify exact dose rates.

**MasterGlenium 3257** can be used in combination with other Master Builders Solutions admixtures to achieve cost effective performance; like addition with MasterPolyheed mid-range water reducers, MasterGlenium range of high-range water reducers.

**MasterGlenium 3257** can be used effectively in combination with non-chloride (**MasterPozzolith 555**) and chloride based (**MasterPozzolith 575**) accelerators to reduce set times and bleed rates for winter concreting.

Each admixture should be dispensed separately into the mix to ensure complete distribution throughout the mix. **MasterGlenium 3257** should not be used in conjunction with other admixtures unless specific test information is available or advised by your local Master Builder Solutions Technical Sales Representative.

## PACKAGING

**MasterGlenium 3257** is available in 1000 litre IBCs or in bulk.

## STORAGE / SHELF LIFE

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat, or flame. Store protected against freezing. Protect from direct sunlight.

Protect from temperatures below: 5°C The packed product is destroyed at low temperatures or by frost.

Protect from temperatures above: 45°C The packed product will be damaged by high temperatures.

## DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) 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.

**MasterGlenium 3257** has a shelf life of 12 months from date of manufacture.

## PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the MB Construction Chemicals Solutions South Africa (Pty) Ltd Safety Data Sheet (SDS) from MB Construction Chemicals Solutions South Africa (Pty) Ltd office.

## 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.