

# MasterGlenium<sup>®</sup> SKY 504

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

## DESCRIPTION

**MasterGlenium SKY 504** is an innovative second-generation superplasticizer based on polycarboxylic ether (PCE) polymers. It is derived directly from the Total Performance Control™ concept. **MasterGlenium SKY 504** is specially engineered for ready-mix concrete. Its particular configuration allows its delayed adsorption onto the cement particles and disperses them efficiently. As compared with other PCE superplasticizers, it is possible to obtain a high-quality concrete mix with accelerated strength development and extended workability without delayed setting characteristics.

The Total Performance Control™ concept ensures that ready-mix producers, contractors and engineers get a concrete that is of the same high quality as originally specified; starting from production at the batching plant, to the delivery and application into place, and followed by its hardening process. Utilizing Smart Dynamic Concrete (SDC) technology it provides a concrete mix with exceptional placing characteristics and accelerated cement hydration for early strength development and high-quality concrete.

**MasterGlenium SKY 504** may be used in combination with **MasterMatrix** for producing Smart Dynamic Concrete (SDC). The technology produces advanced self compacting concrete, without the aid of vibration. For economic, ecological and ergonomic ready-mix / precast concrete production.

## ADVANTAGES

**MasterGlenium SKY 504** 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
- Guarantee to place the same concrete as specified and ordered from ready-mix plant

### The engineer:

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

## PACKAGING

**MasterGlenium SKY 504** is supplied in 210 L drums, 1,000 L containers or in bulk.

## STANDARDS

EN 934-2 Tables 3.1, 3.2, 11.1 and 11.2  
ASTM C-494 Type F&G  
ASTM C-1017 Type I & II

## TYPICAL PROPERTIES\*

Appearance	Whitish to straw coloured liquid
Specific gravity @ 25°C	1.115
pH value	4.0 - 7.0
Chloride content	"chloride-free" to EN 934

## APPLICATION GUIDELINES

The normally recommended dosage rate of **MasterGlenium SKY 504** is 0.8 - 1.5 L/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 SKY 504** is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterGlenium SKY 504** 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.

In order to optimize special requirements, the use of the following complementary additives is suggested:

- Air entraining agent **MasterAir** to improve frost/thaw resistance

Note: **MasterGlenium SKY 504** is not compatible with **MasterRheobuild** superplasticizers.

## STORAGE AND SHELF LIFE

**MasterGlenium SKY 504** should be stored out of direct sunlight and protected from extremes of temperature. The shelf life is 12 months when stored as above.

## HEALTH AND SAFETY

No special requirements must be observed during use. Protection gloves and glasses are recommended. **MasterGlenium SKY 504** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

**MasterGlenium SKY 504** contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

## QUALITY AND CARE

All products originating from Master Builders Solutions 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 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

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## STATEMENT OF RESPONSIBILITY

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## NOTE

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