

# MasterGlenium<sup>®</sup> SKY 504 K

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 K** is an innovative latest generation superplasticizer based on polycarboxylic ether (PCE) polymers. It is derived directly from the Total Performance Control™ concept.

**MasterGlenium SKY 504 K** 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.

**MasterGlenium SKY 504 K** 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.

## TYPICAL APPLICATIONS

**MasterGlenium SKY 504 K** is used for the production of high quality ready-mix concrete.

**MasterGlenium SKY 504 K** may be used in combination with **MasterMatrix** admixtures for producing Smart Dynamic Concrete, capable of self-compaction, even in the presence of dense reinforcement.

## ADVANTAGES

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

## STANDARDS

ASTM C-494 Type F&G  
 ASTM C-1017 Type I & II  
 EN 934-2

## TYPICAL PROPERTIES\*

Appearance	Clear to light brown colored liquid
Specific gravity @ 25°C	1.085-1.110
pH value	4.0 - 7.0
Chloride ion content	"chloride free" EN 934-1

## APPLICATION GUIDELINES

The normally recommended dosage rate of **MasterGlenium SKY 504 K** is 0.8 to 2.5 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.

## MIXING

**MasterGlenium SKY 504 K** is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterGlenium SKY 504 K** 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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In order to optimize special requirements, the use of the following complementary additives is suggested:

- Viscosity modifying agent **MasterMatrix** to produce Smart Dynamic Concrete.
- Air entraining agent **MasterAir** to improve frost/thaw resistance

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

## STORAGE AND SHELF LIFE

**MasterGlenium SKY 504 K** should be stored in closed drums, containers or bulk tanks to protect from evaporation.

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 however recommended. **MasterGlenium SKY 504 K** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

**MasterGlenium SKY 504 K** 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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