

# GLENIUM® SKY 504S

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

## DESCRIPTION

**GLENIUM SKY 504S** is an innovative second generation superplasticizer based on polycarboxylic ether (PCE) polymers. It is derived directly from the Total Performance Control™ concept. **GLENIUM SKY 504S** 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 technology it provides a concrete mix with exceptional placing characteristics and accelerated cement hydration for early strength development and high quality concrete.

**GLENIUM SKY 504S** 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.

## FIELDS OF APPLICATION

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

**GLENIUM SKY 504S** may be used in combination with **MasterMatrix** admixtures for producing Smart Dynamic Concrete, capable of

self-compaction, even in the presence of dense reinforcement.

## FEATURES AND BENEFITS

**GLENIUM SKY 504S** 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

**GLENIUM SKY 504S** is supplied in 210 liter drums, 1,000 liter containers or in bulk.

## TYPICAL PROPERTIES\*

Appearance	Whitish to light brown coloured liquid
Specific gravity @ 25°C	1.120
pH value	6-8

## STANDARDS

ASTM C-494 Type F&G  
ASTM C-1017 Type I & II

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## STORAGE

**GLENIUM SKY 504S** should be stored out of direct sunlight and protected from extremes of temperature. The shelf life is 9 months when stored as above.

## APPLICATION PROCEDURE

### Dosage

The normally recommended dosage rate of **GLENIUM SKY 504S** is 0.8 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

**GLENIUM SKY 504S** is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **GLENIUM SKY 504S** 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

**GLENIUM SKY 504S** is not compatible with **MasterRheobuild** superplasticizers.

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

## HANDLING AND TRANSPORTATION

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

## SAFETY PRECAUTIONS

**GLENIUM SKY 504S** 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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