

GLENIUM[®] Sky 586 +

High water reducer admixture for low W/C ratio concrete with very long workability retention

Description

GLENIUM[®] Sky 586+ is a ready to use, chloride free liquid admixture, based on polycarboxylic ether (PCE) polymers. This innovative third generation superplasticizer is derived directly from the “Total Performance Control” concept. The particular configuration of the polymer allows for its delayed absorption onto the cement particles and disperses these 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.

Fields of applications

GLENIUM[®] Sky 586+ is particularly recommended for the manufacture of concrete with low W/C, very long workability and high mechanical performances at early ages.

GLENIUM[®] Sky 586+ is thus adapted for use in the Ready-Mixed Concrete industry and on building construction sites.

- Concrete with very long workability
- Deep foundations (slurry trench walls, piles)
- Pumping long distances
- SCC (self compacting concrete)
- HPC (high performance concrete)
- UHPC (ultra high performance concrete)

The chemistry of GLENIUM Sky 586+

GLENIUM[®] Sky 586+ is different to other admixtures based on polycarboxylic ethers, due to its unique and specific affinity and fit when combined with cement. The rate of water absorption onto the

cement particles is delayed thereby allowing for improvements in dissolution, formation of ettringite and dispersion. This results in slump retention accompanied by accelerated strength development both at early ages and in the long term.

Features and benefits

GLENIUM[®] Sky 586+ offers the following benefits for:

The ready-mix producer:

- Capability of delivering high quality concrete at any time to the job site
- Production of a concrete with low water cement ratio that meets EN 206-1 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
- More versatile and forgiving concrete mixes

The engineer:

- Insurance that concrete meets original specification
- High quality concrete with better durability

GLENIUM[®] Sky 586 +

Typical properties

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

Appearance	Liquid
Color	Brown
Specific Density	1,08±0,02
pH value	4,0 ± 1,0
Chloride Content	<0,1%
Solid content	24,0±1,2%
Alkali content Na ₂ O equivalent	<3,0%

Application procedure

Mixing

GLENIUM[®] Sky 586+ is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if GLENIUM[®] Sky 586+ is poured into 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 586+ is compatible:

- With viscosity modifying agents GLENIUM[®] Stream, Rheomac[®] 885 F and Rheomac[®] 890 F for the formulation of Rheodynamic concrete self compacting concrete (SCC) or pumped concrete
- With air-entraining agent Micro Air[®] to improve freeze/thaw resistance of concrete
- With the silica fume Rheomac[®] SF 920 D

GLENIUM[®] Sky 586+ is not compatible with Rheobuild[®].

Dosage

The normal recommended dosage rate of

GLENIUM[®] Sky 586+ is 0.2 to 3.0% of the binder content.

Other dosages may be recommended in special cases according to the specific site conditions. In this case please consult your local BASF Construction Chemicals representative.

Packaging

GLENIUM[®] Sky 586+ is supplied in 200litre drums, 1000 liter containers or in bulk.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.

Safety precautions

GLENIUM[®] Sky 586+ is not a fire or health hazard. Spillages should be washed down immediately with cold water. 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 Construction Chemicals SA representative.

Quality and care

All products originating from BASF Construction Chemicals SA, are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001/2000

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As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

BASF Construction Chemicals South Africa (Pty) Ltd

P.O. Box 420, Westonaria, 1780
11 Pullinger Street, Westonaria, 1779
Tel: +27 11 754 1343
Fax: +27 11 754 1105

852 Sixteenth Road, Midrand
PO Box 2801, Halfway House, 1685
Tel: +27 11 203 2405

Website : basf-cc.co.za

