



The Chemical Company

# MasterGlenium® 150

(Formerly known as GLENIUM 150)

## Polycarboxylic Ether Based Versatile High Range Water Reducing Super Plasticizer Concrete Admixture

### Description of Product

**MasterGlenium® 150** is a polycarboxylic ether based final strength increasing workability extending versatile concrete admixture developed for readymix concrete.

Consistent With the TS EN 934-2 Table 11.1, 11.2: Set Retarding High Range Water Reducing/Super Plasticizer Concrete Admixture and ASTM C 494 Type G: Set Retarding High Range Water Reducing/Super Plasticizer Concrete Admixture Standards.

### Fields of Application

- In the production of pumpable and non-pumpable high quality readymix concrete,
- In the production of self compacted concrete that can easily set to densely reinforced concrete elements.
- In the production of non-segregating, flowable Rheoplastic\* concrete.

### Advantages

#### For Readymix Concrete Producers:

- Enables the supply of high quality concrete to construction sites whenever needed.
- Enables flowable, low water/cement ratio concrete consistent with TS EN 206-1 criteria.
- Enables the use of a single product for many applications.

#### For Contractors;

- Guarantees the delivery of the concrete ordered in readymix concrete plant to the construction site as “desired and defined in the construction site”.
- Levels more easily and enables ease of application.
- Gives perfectly smooth surface finishing in concrete placed in molds.
- Enables concrete mixtures that is less affected by aggregate and cement changes and enables various concrete designs with a single admixture.

#### For Engineers:

- Guarantees the concrete’s compatibility to the standards.
- Enables more durable concrete production.

### Technical Data

Structure of the Material	Polycarboxylic ether based
Color	Brown
Density	1.059 - 1.099 kg(liter
Chlorine Content% (EN 480-10)	< 0.1
Alkaline Content% (EN 480-12)	< 3

Obtained in +20°C 50% relative humidity conditions.



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## Application Procedure

Binder (cement-micro silica-fly ash) and aggregate must be mixed until a homogenous mixture is obtained. After adding 80%-90% of the water to be added to the mixture, **MasterGlenium® 150** must be added to the mixture along with the remaining water. **MasterGlenium® 150** must be mixed for 100 sec. or for the duration determined in laboratory experiments in the mixture for a homogenous diffusion.

## Dosage

**MasterGlenium® 150** is suggested to be used as 0.8 – 1.5 kg for 100 kg binder (cement-micro silica-flyash). The dosage to be used must be determined beforehand by laboratory experiments. **BASF Construction Chemicals San. A.Ş.** Technical Service must be consulted for detailed information.

## Compatibility

**MasterGlenium® 150** can be used with the following materials:

1. **MasterGlenium® 150** is not compatible with other **MasterRheobuild®** (NSF\*\* based) series super plasticizers.
2. Can be used with all cement types.
3. Can be used with micro silica, flyash and slag where high binding material like self-compacting concrete is needed to be used.
4. Can be used with air entraining **MasterAir® 200** (environment condition XF1-XF4 according to TS EN 206-1) to increase Freeze – Thaw resistance.
5. Used with **MasterRoc® MS 610** micro silica (environment condition XA1-XA3 according to TS EN 206-1) to improve the performance of concrete and its strength in aggressive

environments.

6. Used with **MasterRoc TCC 735** and **MasterCast® 125** to prevent shrinkage by preventing rapid losing of the water in concrete mixture.
7. Used against fissures from plastic shrinkage with synthetic fibers **MasterRoc® FIB. SP 530/540/550** and steel fibers.
8. In environments with high temperature and high air flow, must be used with a suitable cure material like **MasterKure® 101**, **MasterKure® 107**, **MasterKure®176** or **MasterKure® 181** to prevent the water of the mixture inside the concrete from evaporating.

## Watchpoints:

- Not suitable to use with MasterRheobuild® series (NSF based) admixtures.
- Concrete design and admixture dosage must be determined by prior laboratory trials according to concrete class and properties.
- The determined binder (cement-micro silica-fly ash), at the end of laboratory trials, thin and rough aggregate must be mixed until a homogenous and dry mixture is obtained. If admixture is added to the dry mixture before adding mixture water, then it will be absorbed by the mixture and uniform distribution will not be obtained. Even if all the mixture water is added on top of this, aimed concrete class and properties cannot be obtained. Since the mixture will need extra water, the water amount in design values will be exceeded and the concrete's mechanical properties will be below the aimed value. For this reason, concrete admixtures must not be added directly to the dry mixture.
- If MasterGlenium® 150 is to be used under +15°C, then necessary precautions have to be taken in cure conditions (temperature and time) and cement doses.



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- Since it is a specially designed product for the user, it may exhibit different properties based on cement type and aggregate structure. For this reason, prior experiments must be made to check if the admixture is consistent with the material before the concrete production.
- The performance of **MasterGlenium® 150** is reduced if it is mixed with other admixtures in other classes. So, the storing and mixing equipments have to be used after cleaning. Contact **BASF Master Builders Solutions San. A.Ş.** technical service for detailed information.

### Packaging

Bulk

### Storage

Must be stored in original packing, above +5°C environment. If the material freezes because of storing in undesirable environments, it must be thawed by keeping it in room temperature without direct heating, and mixed by mechanical methods until it becomes homogenous. Pressured air must not be used when mixing.

### Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages can be used throughout the shelf life if the package cover is well closed.

### Health and Safety Precautions

Work cloth, protective gloves, goggles and masks concordant with Work and Worker Health rules must be used during the application. Avoid contact to skin and eyes during storing and application. If such a

contact occurs, it must be washed by soap and plenty of water. Consult a physician urgently if swallowed. Food and drink must be kept outside the application areas. Must be stored away from children. Please look at the Material Safety Data Sheet for detailed information.

(\*) *Rheoplastic Concrete: Although has the same water/cement ratio with the reference concrete of approximately 7 cm slump, easily flowable (20 – 22 cm slump), non-segrating concrete*

(\*\*) *NSF (Naphthalene Sulphonate Based Products)*

### Disclaimer

This information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, **BASF Yapı Kimyasalları San. A.Ş.** is only responsible from the quality of the product. **BASF Yapı Kimyasalları San. A.Ş.** cannot be hold responsible from the results caused by applications of the product not in accordance with the written suggestions of how and where to use the product and/or faulty applications.

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