

MasterRheobuild 310

Plasticizer admixture used to improve consistency of concrete in the place of pouring

DESCRIPTION

MasterRheobuild 310 is a modified lignin sulphonate based, plasticizer admixture that is mostly used in the production of construction site delivered, flowable concrete for all environmental conditions and different concrete classes.

THE CHEMISTRY

Admixtures generally go into reaction only with the binder. When the admixture is added to the concrete, it is absorbed by the particles of the binder. The particles of the binder push each other by electrostatic force. Thus, the desired workability is obtained by less amount of water. Proportional with the decrease of mixture's water amount, mechanic strength increases.

FIELDS OF APPLICATION

Recommended for use in:

- In concretes with short or long transportation distance where consistency is desired to be increased in the construction site.
- When the concrete leaving the plant with low consistency (S2-S3) is desired to be delivered to the construction site with high consistency (S3-S4).
- To improve process rate of the concrete in construction site and reduce work time.

FEATURES and BENEFITS

- Increases the consistency of concrete in construction site by 6-8 cm on average.
- Increases the consistency of concrete by regulating consistency losses during the transportation time.
- Improves workability and quality of concrete without changing its water/cement ratio.
- MasterRheobuild 310 does not contain chloride.

APPLICATION PROCEDURE

MasterRheobuild 310 is poured into transit mixer from its scaled package before the delivery and mixed for at least 3 minutes in the maximum speed. This mixing time is enough to obtain a homogenous mixture.

- Concrete is loaded to transit mixer from the plant with 14 ± 1 cm target consistency. (This target consistency may drop a little in winter).

- The transit mixer operator takes MasterRheobuild 310 plasticizer admixture drum from the plant as totally full.
- There are two lines on the drum showing onethirds and two-thirds volumes of the drum.
- Considering the vehicles waiting in the line, the transit mixer operator starts to pour MasterRheobuild 310 admixture into the container of the vehicle, according to the concrete amount (whole drum for 7-9 m³, two-thirds for 4-6 m³, one-third for 2-3 m³) approximately five minutes before pouring the concrete. The container is rotated for three minutes in the maximum speed. At the end of this process, consistency of the concrete increases 6-8 cm to reach S4.
- If the concrete's consistency desired by construction site or delivered to construction site is S3 or more, then the concrete is poured without adding admixture.

DOSAGE

MasterRheobuild 310 is suggested to be used as 0.4-0.7 kg for 100 kg binder (cement-microsilica-fly ash). The dosage to be used must be determined beforehand by laboratory experiments according to concrete class and properties. Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd.Şti Technical Service Department must be consulted for detailed information.

COMPATIBILITY

MasterRheobuild 310 can be used with all types of **EN 197 Cements**. For use with other special cements, contact with Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd.Şti Technical Services Department.

MasterRheobuild 310 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing MasterRheobuild 310 they must be dispensed separately.

MasterRheobuild 310 is compatible and recommended for use with:

- MasterX-Seed - Crystal Speed Hardening Concept for accelerated early strengths
- MasterMatrix to modify the viscosity of SCC.
- MasterFinish, demoulding agents for easy formwork removal and improved finish.
- MasterKure, curing compounds for highly efficient water retention and friendly use.

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MasterRheobuild 310 is **not compatible** with all admixtures of MasterGlenium series. When such complimentary admixtures are required it is important that laboratory trials are performed, prior to any supply, to determine the respective dosages of any complimentary admixture, and the suitability, in the fresh and hardened state, of the resultant concrete. In these circumstances we recommend that you consult Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd.Şti Technical Services Department for further advice.

PACKAGING

Bulk

Product Data	
Structure of the Material	Modified Lignin Sulphonate Based
Appearance	Brown
Specific gravity @ 20°C	1.07 - 1.09 kg/l
pH-value	5-7
Alkali content (%)	≤ 10.00 (by mass)
Chloride content (%)	≤ 0.10 (by mass)
Corrosion behavior	Contains only components according to BS EN 934-1:2008, Annex A.1
Dangerous substances	Comply with annex AZ.
Logistics	
Shelf life	12 months if stored according to manufacturer's instructions in unopened container.
Storage conditions	Store in original sealed containers and at temperatures between 5°C and 30°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Handling and transportation	Refer to MasterRheobuild 310 Safety Data Sheet.
Disposal	Refer to MasterRheobuild 310 Safety Data Sheet.

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HEALTH AND SAFETY

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapor until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

SPILLAGE

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd.Şti " (the Company) endeavors to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use. Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application. Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest product literature.

CONTACT INFORMATION

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