

MasterSet[®] R 2

High Performance Plasticizer/Set Retarding Mortar Admixture Used in Ready Mixed Fresh Plaster and Mortar Production
EN 934 - 2: T10

Material Description

MasterSet[®] R 2 is a high performance plasticizer/ set retarder mortar admixture that can be used combined with **MasterAir[®] MA 1** in summer and winter seasons in ready mixed fresh plaster production.

Areas of Application

- In the production of fresh, coarse and fine plaster.
- In mortars used in the manufacturing of bricks and ytongs.
- In plaster mortars where long-time workability is desired. (can be workable for 24, 48, 72 hours)
- In plaster mortars where impermeability is desired to be improved

Characteristics and Benefits

- Retards initial and final set in plasters (up to 24, 48, and 72 hours).
- Improves strength to Freeze-Thaw cycle.
- Improves neatness and workability in plasters.
- It is economical.
- Increases mechanic strengths of mortar by the reduction in mixing water.
- In combined applications with MasterAir[®] MA 1, improves mortars' neatness and workability properties.

Dosage

For most concrete mixes using average concrete ingredients, **MasterSet[®] R 100** admixture is recommended for use at the rate of:

By Mass - 0.25 to 2.0 kg per 100 kg of cement (binder).

The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilized in special cases according to specific job conditions. If required consult MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect. Where the concrete is to be machine finished by utilizing power float or power trowelling methods, we recommend that you contact the according to specific job conditions. If required consult MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department for dosage rate guidance.

Processing Method

- Plaster design and admixture dosage must be determined by prior laboratory trials according to concrete class and properties.

Technical Properties

Appearance	Pinkish, Semi Transparent
Specific Gravity (20°C'de)	1.13 -1.20 kg/lt
pH - Value	6.0 – 9.0
Chloride Content (%)	≤ 0.10
Application Ground Temperature	+5°C - +35°C
Service Temperature	-20°C - +80°C

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- The admixture amount in the mixture is calculated by multiplying the sum of cement and secondary binders (such as micro silica fly ash-slag) in the mixture by admixture dosage ratio
- If higher doses are used than the suggested dosage, then mechanical strengths decrease due to the increase of micro air amount in the mixture.
- The determined binder (cement-micro silica fly ash), at the end of laboratory trials, coarse and fine aggregate must be mixed until a homogenous and dry mixture is obtained. If admixture is added to the dry mixture before adding mixing water, then it will be absorbed by the fine aggregate and uniform distribution will not be obtained. Even if all the mixing 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.

Compatibility

MasterSet[®] R 2 can be used with all types of **EN 197** Cements. For use with other special cements, contact our MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department.

MasterSet[®] R 2 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing **MasterSet[®] R 2**, they must be dispensed separately.

When non-compensated admixtures are required, it is important to conduct laboratory testing prior to any application in order to determine the suitability of the relevant dosages for both the fresh and hardened states of the concrete. In such cases, it is recommended to consult the Technical Services Department for further guidance.

Packaging

MasterSet[®] R 2 is available in bulk and 1000 kg IBCs.

Shelf Life

12 months if stored according to manufacturer's instructions in unopened container.

Storage

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.

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.

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Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

Contact

MBT Teknik Yapı Kimyasalları San. ve Tic. A.Ş.
Eyüp Sultan Mah. Sekmen Cad. Hayy 1000A
No:26/8 Sancaktepe, İstanbul
Tel: 0216 561 35 45 www.mbt-tech.tr
master-builders-solutions.com/en-tr