

MasterCast 301

High Performance Plasticizer Admixture For Plaster Mortars EN 934-3: T2

DESCRIPTION

MasterCast 301 is a high performance micro air entraining mortar admixture designed to improve impermeability, workability, and Freeze-Thaw resistance in plaster mortars.

FIELDS OF APPLICATION

- In inner-outer spaces for vertical applications.
- In plaster mortars to improve impermeability.
- In brick and stone coating mortars for improving workability.

FEATURES and BENEFITS

- Has homogenous air entraining property.
- Reduces segregation and efflorescence effects which can be seen on mortars without admixture.
- Improves neatness and workability properties in mortars.
- Improves strength to Freeze-Thaw cycle.
- It is economical

APPLICATION PROCEDURE

Preparation of Substrate

Cement based surfaces have to bearing, dustless, and clean. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin traces that can weaken adherence. The sides of the surface, which are formed by breaking, must be cut as straight as possible, rust on the reinforcement must be cleaned, and new reinforcement must be added if necessary. If there is water leak on the surface, it has to be drained or sealed by a suitable stopper. Surface must be wetted, and MasterCast 301 admixture mortar has to be applied on wet/dry surface.

Mixing

To obtain MasterCast 301's air entraining properties effectively, it must be mixed by shovel or trowel until a homogenous and unumpy mixture is obtained.

In Plaster Mortars

1 m³ washed river sand in suitable gradation is mixed with 350 kg cement. Liquid mixture, prepared by adding 10-17 kg MasterCast 301 into 120 kg water, is added onto powder mixture until trowel consistency mortar is obtained. Surface must be wetted and

MasterCast 301 admixture mortar has to be applied on wet/dry surface.

Watch Points

- Concrete design and admixture dosage must be determined by prior laboratory trials according to concrete class and properties.
- The determined ratio of cement and sand at the end of laboratory trials 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.
- The admixture amount in the mixture is calculated by multiplying the sum of cement and secondary binders (such as micro silicaflyash-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.

Cleaning of Tools

All the equipment must be cleaned by water immediately after the application.

DOSAGE

The normally recommended dosage rate of MasterCast 301 is approximately:

- *By Weight* – 3 to 5 kg per 100 kg of cement (binder) content.

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 Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd.Şti Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect.

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PACKAGING

MasterCast 301 is supplied in 20-kg canes.

Product Data	
Appearance	Yellow
Specific gravity @ 20°C	1.0 – 1.1 kg/lt
pH-value	10-11
Application ground temperature	+5 °C +35°C
Service Temperature	-20 °C +80°C
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 MasteCast 301 Safety Data Sheet.
Disposal	Refer to MasteCast 301 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

Master Builders Solutions Yapı Kimyasalları
Sanayi ve Ticaret Ltd. Şti.
Head Office Address : Barbaros Mah. Begonya Sok.
Nidakule Ataşehir Kuzey C Kapısı No:3E/5 ,34746
Ataşehir, İstanbul, Türkiye
Tel: 0216 217 88 00

Mail: mbs.tr@mbcc-group.com
www.master-builders-solutions.com/tr-tr

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