

MasterRheobuild® 1000

High Range Water-Reducing and Hardening Accelerator Admixture for Concrete
EN - 934 - 2 : T 3.1/3.2

Material Description

MasterRheobuild® 1000 is a naphthalene sulphonate based high range water reducing/superplasticizer admixture that improves the early and final strengths of concrete by giving Rheoplastic property.

Areas of Application

- Concrete where high plasticity, normal-setting characteristics and accelerated strengths are desired
- Prestressed, precast and ready-mixed concrete applications
- Civil and mining applications

Characteristics and Benefits

- Less dependence on consolidation energy
- Early strength allows for accelerated construction methods, resulting in completion dates ahead of schedule
- Engineering specification changes can allow for greater limits on the free-fall of concrete, lift heights, concrete temperatures and potential economic mixture adjustments.
- Job time and cost reduced through higher productivity rates and/or reduced labor

Plastic State;

- Controlled set times
- Cohesive and non-segregating
- Minimal bleed water

Hardened State;

- Higher earlier strengths than can be achieved with conventional high-range water reducers
- Increased ultimate compressive strength
- Higher modulus of elasticity
- Improved bond strength to steel
- Low permeability
- High durability
- Reduced shrinkage and creep
- Highly reliable in-place structural integrity

Processing Method

MasterRheobuild® 1000 is introduced into the mixer together with water. The plasticising effect or water reduction is higher if the admixture is added to the damp concrete after 80% of the water has been added. The addition of **MasterRheobuild® 1000** to dry aggregate or cement is not recommended, as it lowers the plasticising effect or water reduction.

Technical Properties

Structure of the Material	Naphthalene Sulphonate Based
Appearance	Brown
Specific gravity (20°C)	1,17 – 1,22 kg/lit
pH Value	5 - 8
Alkali Content	≤ 10.00
Chloride Content	≤ 0.10
Corrosion Behaviour	Contains only components according to BS EN 934-1:2008, Annex A.1
Dangerous Substances	Comply with annex AZ.

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Dosage

The recommended dosage ratio for **MasterRheobuild[®] 1000** additive is approximately as follows:

By weight – 1.0 – 2.0 kg per 100 kg of cement (binder) is recommended.

The dosage ratios given above are for normal use. Other dosage ratios can be adjusted according to specific usage conditions. Please contact **MBT Tech** for recommendations if necessary. The results of trial mixtures should be taken into account to ensure optimum dosage and effect.

Compatibility

MasterRheobuild[®] 1000 can be used with all types of **EN 197 Cements**. For use with other special cements, contact with **MBT Tech** Services Department.

MasterRheobuild[®] 1000 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing MasterRheobuild 1000 they must be dispensed separately.

MasterRheobuild[®] 1000 is compatible and recommended for use with:

- **Master X-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.

MasterRheobuild[®] 1000 is **not compatible** with all admixtures of **MasterGlenium[®]** and **MasterEase[®]** 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 MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department for further advice.

Packaging

MasterRheobuild[®] 1000 is available in bulk, 30 kg canes, 250 kg barrels and 1200 kg tanks.

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.

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Spillage

Chemical products can cause damage; clean spillage immediately.

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

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