

# MasterRheobuild® T 1 (Formerly known as Rheobuild® T 1)

## Superplasticizer Designed Especially For Underground Construction Works

### DESCRIPTION OF PRODUCT

**MasterRheobuild® T 1** is a superplasticizer designed especially for underground construction works. Compared to traditional superplasticizers **MasterRheobuild® T 1** has a more powerful dispersing effect and is designed for wet mix sprayed concrete.

### FIELDS OF APPLICATION

The excellent dispersing effect makes **MasterRheobuild® T 1** the ideal choice for wet mix sprayed concrete where high early and final strengths are required. **MasterRheobuild® T 1** provides a reduction in water content of approximately 25-30% and still achieve the required workability.

This makes it ideal for:

- Temporary and final sprayed concrete linings
- Single Shell Linings
- Wet system sprayed concrete applications where high early and final strength is needed
- Backfill grouting applications behind the segments where long term slump retention is needed
- Concrete for underground construction works to meet the highest demands of workability and pumpability combined with strength and durability
- Tunnel lining concrete applications

### FEATURES AND BENEFITS

- Allows for highly workable concrete at the lowest w/c ratio-without segregation and bleeding
- Provides extended open time to allow transportation and placing of the sprayed concrete, even hours after batching
- Provides reduced wear and tear on the pump
- In combination with **MasterRoc® SA 160**, **MasterRoc® SA 187**, **MasterRoc® SA 189** the early setting and strength development of the sprayed concrete can be accelerated
- Greater durability from improved mechanical properties in the concrete
- High early & final strengths
- Reduced permeability due to lower water/cement ratio

### COMPATIBILITY

**MasterRheobuild® T 1** is compatible with all types of cement complying with international standards.

**MasterRheobuild® T 1** can be used in combination with the following admixtures and additives.

- Air entraining admixtures to optimize freeze/thaw durability
- Microsilica (**MasterRoc® MS 610**) and nanosilica (**MasterRoc® MS 685**)
- Shrinkage compensating admixture
- Synthetic and Steel Fibres
- Concrete Improvers

### PACKAGING

**MasterRheobuild® T 1** is available in 250 kg barrels, 1000 kg IBC containers and in bulk.

### MIXING

**MasterRheobuild® T 1** is a ready to use admixture and must be added prior to the addition of other admixtures to the mix. Optimum plasticizing effect and thus water reduction is achieved if **MasterRheobuild® T 1** is added immediately after 50 – 70% of the water. Avoid adding **MasterRheobuild® T 1** to dry aggregate or cement.

### CONSUMPTION

The consumption of **MasterRheobuild® T 1** in the range of 0.8-2.5 kg of the total binder weight. For further information please contact your local **Master Builders Solutions** representative.

### STORAGE

**MasterRheobuild® T 1** should be stored between +5°C and +30°C.

### HANDLING

If stored in original unopened containers it will have a shelf life of at least one year.

### TECHNICAL DATA

Form	Liquid
Colour	Transparent
Density; 20°C	1.214 ± 0.03 kg/liter
Ph Value	6.5 – 9.0
Alkali Content (Na <sub>2</sub> O eqv)	Max. %3
Chloride Content	<0,1 % by mass

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### SAFETY PRECAUTIONS

**MasterRheobuild® T 1** contains no hazardous materials and is completely transport class free. However, it is recommended to use standard handling procedures with the product as it is irritating to eyes and skin. Wear gloves and eye protection and wash splashes to the skin with soap and water at the end of shifts or at breaks.

### DISCLAIMER

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd. Şti.** is only responsible for the quality of the product **Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd. Şti.** 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 INFORMATION

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**MasterRheobuild® T 1** Technical Data Sheet -Revision  
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<b>MasterRheobuild T 1</b>  Yüksek Oranda Su Azaltıcı ,Süperakışkanlaştırıcı Beton Katkısı ; EN - 934 - 2 : T 3.1/3.2  (High Range Water Reducing, Superplasticizing Admixture ; EN - 934 - 2 : T 3.1/3.2)	
Klorür İçeriği ( Chlorine Content )	<% 0,1 Kütlece (in mass)
Alkali İçeriği ( Alkaline Content )	<% 5 Kütlece (in mass)
Korozyona Etkisi (Corrosion Behavior )	Sadece EN 934-1:2008,EkA.1'de verilen bileşenleri kapsar.Contains components only from EN 934-1:2008,Annex A.1
Tehlikeli maddeler (Dangerous Substances )	Tamamen Ek-ZA'ye uygundur.Comply with annex ZA