

## MasterPolyheed® 3535

Superplasticizer for the production of high quality backfilling grouts with exceptional workability retention for TBM tunnels.

#### PRODUCT DESCRIPTION

MasterPolyheed 3535 is a high performance admixture, mainly for use in the annular grouting behind the concrete lining of a Tunnel Boring Machine. At the start of the mixing process the presence of polymeric lateral chains, linked to the polymer backbone of the admixture, generate a steric hindrance which stabilises the hydraulic particles capacity to separate and disperse.

#### **FIELDS OF APPLICATION**

Masterpolyheed 3535 is used for the production of high quality grouts.



#### **FEATURES AND BENEFITS**

- Production of grouts with low water cement ratios with excellent workability retention properties.
- Improves the pumping property, especially with coarse, angular or poorly graded sands and aggregates

#### **PACKAGING**

MasterPolyheed 3535 is supplied in IBCs or in bulk.

#### **TECHNICAL DATA**

Form Liquid

Color Medium to dark brown

Density (at +25°C) 1.055 pH value 5 - 7

Chloride content "chloride-free" to EN 934-2

#### **STANDARDS**

ASTM C-494 Type F&G BS EN 934-2

# APPLICATION PROCEDURE DOSAGE

The normally recommended dosage rate of MasterPolyheed 3535 is 0.60 to 2.25 litre per 100kg of total cementitious material. Other dosages may be recommended in special cases according to the specific site conditions. In this case please consult our Technical Services Department for advice.

#### **MIXING**

MasterPolyheed 3535 is a ready-to-use admixture to be added to the grout as a separate component. Optimal result is obtained if MasterPolyheed is poured into the grout mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

#### **COMPATIBILITY**

MasterPolyheed 3535 is not compatible with MasterRheobuild superplasticizers.

MasterPolyheed 3535 is suitable for mixes containing:

Microsilica (Silica Fume) Fly Ash (PFA)

GGBS (ground granulated blastfurnace slag)

#### **STORAGE**

MasterPolyheed 3535 should be stored in unopened containers or bulk tanks so as to protected from extremes of temperature. The shelf life is 9 months when stored as above.

#### HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. MasterPolyheed 3535 is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

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#### **SAFETY PRECAUTIONS**

MasterPolyheed 3535 contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

#### **NOTE**

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

#### **QUALITY AND CARE**

All products originating from Master Builders Solutions's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

- \* Properties listed are based on laboratory controlled tests.
- Registered trademark of a MBCC Group member in many countries of the world

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### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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