TYTRO® WR 171

Superplasticising admixture for shotcrete

Product Description

TYTRO®WR 171 is a high range water reducer commonly referred to as a superplasticiser. It is an aqueous solution of a modified naphthalene sulphonate. TYTRO®WR 171 contains no added chlorides and complies with AS 1478.1 – 2000 Type HWR. TYTRO®WR 171 contains no TEA.

Product Advantages

- TYTRO® WR 171 is suitable for shotcrete with a wide range of strengths eliminating the need for other superplasticisers.
- It produces very high slump shotcrete at low water cement ratios without segregation and loss of strength.
- It can be added at the batch plant during the batching process eliminating the need for on-site addition.
- An extremely versatile superplasticiser that has a wide range of applications with superior results.

Dispersion

TYTRO®WR 171 produces concrete with higher slumps without the need to add water. TYTRO®WR 171 has superior dispersing properties that allow full cement (and pozzolanic materials) hydration at lower water-cement ratios.

Application

TYTRO®WR 171 allows shotcrete to be produced over a wide range of strengths, at low water-cement ratios with high placement slumps. TYTRO®WR 171 is ideal for use in wet mix shotcrete applications to produce high early strengths.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Addition Rates

Addition rates of TYTRO®WR 171 can vary depending on the application, however a typical dose range would be between 400 and 1,000mL / 100kgs total cementitious materials. Higher dose rates can be considered for advanced performance.

For best results TYTRO®WR 171 should be added with the last addition of batch water. At a given water-cement ratio, the slump can be controlled by varying the addition rates. It is GCP's recommendation that trials are conducted beforehand to determine the optimum dose range to suit your application. If further assistance is required, please consult your local GCP representative.

Compatibility

TYTRO®WR 171 is compatible with Portland cements including fly ash, blast furnace slag silica fume and limestone blends. TYTRO®WR 171 can be used with TYTRO®HE 270 to produce high quality, water-tolerant shotcretes. It is also compatible with the TYTRO®range of shotcrete admixtures. All admixtures should be added to the mix separately and not premixed with other admixtures prior to addition. Please consult your local GCP representative for recommendations on compatible admixtures.

Packaging & Storage

TYTRO®WR 171 is available in 1,000L totes and 205L drums. Shelf life is 12 months.

Health and Safety

See TYTRO®WR 171 superplasticiser Material Safety Data Sheet or consult GCP Applied Technologies.

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

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