

TYTRO[®] RM 475

Rheology-modifying and mix-enhancing admixture for shotcrete

Product Description

TYTRO[®]RM 475 is a rheology-modifying and mix-enhancing admixture formulated for shotcrete applications. TYTRO[®] RM 475 is based on a high molecular weight polymer that is designed to improve cohesion, flow, lubricity and “softness” to concrete.

Product Advantages

- TYTRO[®] RM 475 is a workability/pumpability - enhancing admixture which reduces friction within a shotcrete mix, making placing, pumping and finishing much easier.
- Shotcrete produced with TYTRO[®] RM 475 is especially suitable for large scale tunneling and mining applications as it has neutral setting time and high early strength, allowing rapid progress to be achieved.
- Reducing or eliminating the amount of silica fume required.

Compatibility with Cements

TYTRO[®]RM 475 can be used with all types of Portland Cements and it is effective in concretes containing pulverised fly ash and/or ground granulated blast furnace slag. For use with special cements we recommend that you consult your local GCP representative.

Compatibility With Other Admixtures

TYTRO[®]RM 475 is compatible with TYTRO[®]shotcrete admixtures. The performance of the material may be affected by the presence of other chemicals and we would recommend that GCP Applied Technologies be consulted in such circumstances.

Method of Use

TYTRO[®]RM 475 is supplied ready to use. When producing high workability concrete TYTRO[®]RM 475 should be added “up-front” with the initial part of mix water followed by other admixtures.

Dispensing Equipment

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

Addition Rates

TYTRO[®]RM 475 can be used at 500 – 1,000mL /m³. As with most products of this type, the magnitude of the effect obtained with TYTRO[®]RM 475 is governed by the quantity of product used, water-cementitious ratio, and the specific nature of concrete and its constituent materials.

It is necessary therefore to assess performance under site conditions using site materials to determine optimum dosage and effect on both plastic and hardened shotcrete properties, such as cohesiveness, workability retention, set characteristics, early rate of strength gain, ultimate compressive strength and shrinkage when these are of consequence. For advice and assistance with your trials we would recommend that you consult GCP Applied Technologies.

Health and Safety

TYTRO[®]RM 475 is formulated from chemicals which present no fire or health hazards. If, however, it is spilled, the floor will be made slippery and should be washed down immediately with cold water. For further information, see TYTRO[®]RM 475 Material Safety Data Sheet, or consult GCP Applied Technologies.

Packaging

TYTRO[®]RM 475 is supplied in 205L drum and 1,000L tote-tanks.

TYTRO[®]RM 475 should preferably be stored protected from frost. If the product does become frozen, it should be carefully mixed after thawing out to restore it to its normal state.

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