

Magnus 700G

High Range Water Reducing and Set Retarding Admixture
(ASTM C494 TYPE G)

Magnus 700G is a high performance, economical, liquid, ready-to-use, high-range water-reducing and retarding admixture designed to enhance the properties of fresh and hardened concrete.

It contains no chloride and meets ASTM C494 requirements for Type G, D and B. Specific gravity is 1.190 +/- 0.005.

Magnus 700G is highly recommended for a wide range of concrete strengths - from 2,000 psi (lean concrete) all the way to over 8,000 psi at 28 days.

ADVANTAGES

Magnus 700G imparts the following improvements in both fresh and hardened concrete.

1. Reduced water content for a given slump or higher slump for a given water content. Water reduction is from 12% at lower dosages up to 25% at higher dosages.
2. Extended but controlled setting time and excellent slump retention.
3. Increased compressive and flexural strengths at all ages.
4. Better workability, finishability, and pumpability even for concrete with low binder content.
5. Improved concrete economy.
6. Increased durability, and reduced permeability, bleeding, segregation and cracking.

RECOMMENDED DOSAGE

Magnus 700G has a recommended dosage range of 500 to 1,400 ml per 100 kg of cementitious materials.

For most applications, a dosage of 840 ml per 100 kg of binders is often used. For flowing concrete or high strength concrete, a dosage of 1,000 ml to 1,200 ml per 100 kg of binders is optimal.

Exceeding the upper range of the recommended dosage (1,400 ml per 100 kg of binders) is not



NIGHT POURING AT TPLEX PROJECT. *The state-of-the-art wet-mix concrete batch plant of Ten-Four Readymix Concrete, Inc. at Rosario, La Union produces high performance concrete using **Magnus 700G** to be poured at the TPLEX Project.*

encouraged, as this may result to extended setting time of concrete.

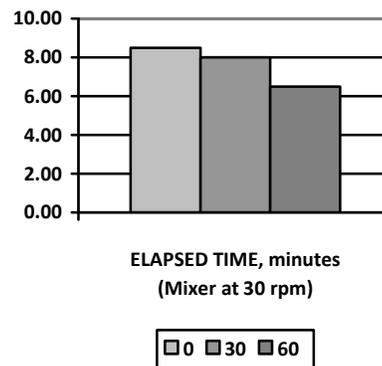
Magnus 700G is introduced into the mixer together with the mixing water after about 70 % of the water has been added.

PERFORMANCE DATA – Normal Strength Concrete

Magnus 700G delivers high compressive strengths and excellent slump retention, even during hot weather concreting.

The following mix used 400 kg of local Type I cement per cu.m. of concrete, 19 mm coarse aggregates and S-1 fine aggregates.

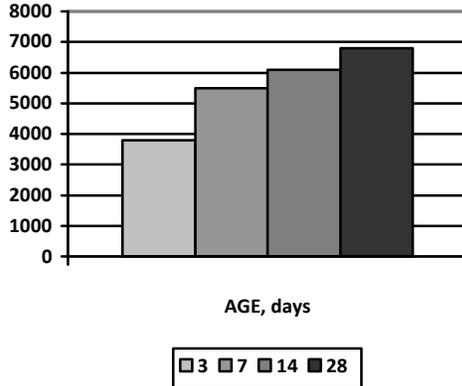
SLUMP, inches



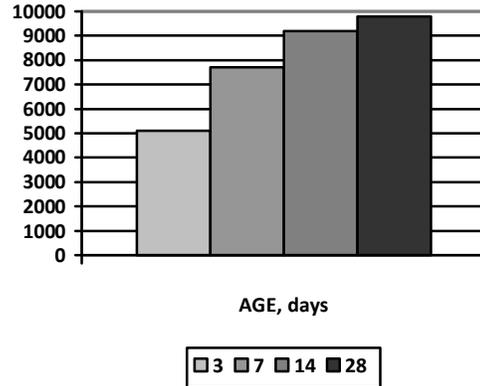
The water-cement ratio was 0.460. Dosage of **Magnus 700G** was 840 ml per 100 kg of cement. Samples (150 mm x 300 mm cylinders) were water cured at about 28 deg. C.

The water-cement ratio was 0.330. Dosage of **Magnus 700G** was 1,200 ml per 100 kg of cement. Samples (150 mm x 300 mm cylinders) were water cured at about 28 deg. C.

COMPRESSIVE STRENGTH, psi



COMPRESSIVE STRENGTH, psi



NOTE - The data shown are based on controlled laboratory tests. Tests results may vary depending on materials used and site conditions. For specific performance requirements of both fresh and hardened concrete, trial mixes should be performed with job materials and conditions.

PERFORMANCE DATA – High Strength Concrete

The very strong water reducing action of **Magnus 700G** at higher dosages allows the attainment of very low water-cement ratios (for high strength), while delivering high or flowing slump (for ease of pumpability, placement and consolidation).

The following mix used 560 kg of local Type I cement per cu.m. of concrete, 19 mm coarse aggregates and S-1 fine aggregates.

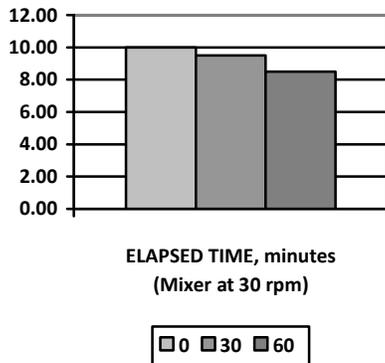
PACKAGING, STORAGE AND SHELF LIFE

Magnus 700G is available in bulk, 208-liter drums, 20-liter pails and 4-liter containers. It can be stored up to 12 months, at moderate temperatures, in unopened original packaging.

HANDLING AND SAFETY

Magnus 700G is for use in concrete only. Handle with care. Harmful if ingested. Keep away from children. Please refer to the MSDS for detailed safety information.

SLUMP, inches



CONTACT US

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