

TETRAGUARD® AS20

Shrinkage reducing admixture

DESCRIPTION

Introduced in 1985, **TETRAGUARD AS20** admixture is the first chemical admixture in the world to reduce drying shrinkage in concrete and mortar, and the potential for subsequent cracking.

TETRAGUARD AS20 admixture can be used in any mortar and concrete applications where reduced shrinkage is required.

TETRAGUARD AS20 has been developed to replace/enhance inorganic expansive admixtures that were being used to prevent drying shrinkage cracking. These expansive admixtures acted by inducing compressive stresses in concrete and offset tensile stresses caused by drying shrinkage.

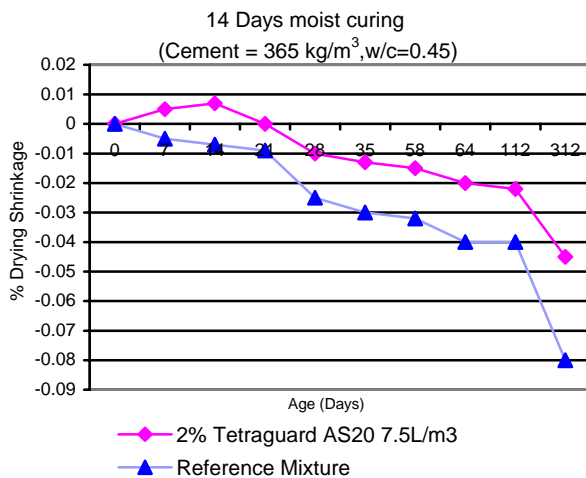
TETRAGUARD AS20 admixture functions by reducing the capillary tension of pore water, a primary cause of drying shrinkage.

FEATURES AND BENEFITS

- Reduction in drying shrinkage** Better concrete quality.
- Reduction in micro cracking** Improves watertightness, aesthetics and durability.
- Reduction of creep** Minimises prestressed loss.
- Minimised curling** Reduces stresses induced from one-dimensional surface drying in concrete slabs and floors

TYPICAL PERFORMANCE DATA

Example of the influence of **TETRAGUARD AS20** on drying shrinkage



APPLICATION

Integral Additional Method

TETRAGUARD AS20 may be added to the concrete mix during the initial batch sequence or at the jobsite.

If the delayed addition method is used, mixing at high speed for 3 to 5 minutes after addition of **TETRAGUARD AS20** will result in mixture uniformity.

DOSAGE

The dosage range of **TETRAGUARD AS20** is 1.0 to 2.5% by mass of cementitious materials (1.0 to 2.5 L/100 kg) in concrete mixtures and mortars to achieve desired performance. For most concrete mixes, the recommended dosage of **TETRAGUARD AS20** is 7.5 L/m³. The mix water content should be reduced to account for the quantity of **TETRAGUARD AS20** used.

PACKAGING

TETRAGUARD AS20 is available in 205 L drums.

SHELF LIFE

TETRAGUARD AS20 can be stored for 12 months if stored at temperatures above 5°C, in tightly sealed original drums. If found to be frozen, thaw it and reconstitute by stirring.

PRECAUTIONS

TETRAGUARD AS20 is a potentially combustible material with flash point of 98°C. This is substantially above the upper limit of 60°C for a classification as a flammable material. Nonetheless, this product must be treated with care and protected from excessive heat, open flame or sparks.

For detailed Health, Safety and Environmental recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

1-1-2-0208

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The Chemical Company

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STATEMENT OF RESPONSIBILITY

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NOTE

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