



# EUCON SRA-XT

## SHRINKAGE REDUCING ADMIXTURE

### DESCRIPTION

EUCON SRA-XT is a ready to use liquid admixture designed to reduce drying shrinkage and the potential for subsequent cracking in concrete and mortar for air entrained concrete. It has been specially formulated to maintain a stable volume of air as well as a reliable air void system. EUCON SRA-XT reduces the surface tension of the meniscus formed at the air-water interface in the pores. This reduces the internal tensile stresses that cause shrinkage of the cement paste. Drying shrinkage can be reduced up to 50% when using EUCON SRA-XT, but a range of 35% - 50% is usually observed. EUCON SRA-XT contains no added chlorides or chemicals known to promote the corrosion of steel.

### PRIMARY APPLICATIONS

- Floors
- Foundations
- Silos
- Concrete pipes
- Interior/Exterior concrete
- Walls
- Watertight construction
- Artificial skating rinks
- Water purification plants
- Swimming pools
- Underground construction
- Water tanks

### FEATURES/BENEFITS

- Can be used in air entrained concrete
- Drying shrinkage may be reduced up to 50% at one year and beyond, depending on mix constituents.
- Reduces cracking caused by drying shrinkage.
- Increases the life of the structure.
- Decreases expensive maintenance costs and increases the durability of the structure.

### TECHNICAL INFORMATION

These results were obtained under laboratory conditions with materials meeting the specifications of the stated ASTM method. Changes in the materials, mix design, mixing methods, temperature, and site conditions can affect the dosage response of EUCON SRA-XT. Trial mixes should be run in order to confirm design dosage response and concrete physical requirements are met.

#### Eucon SRA-XT Chemical Properties:

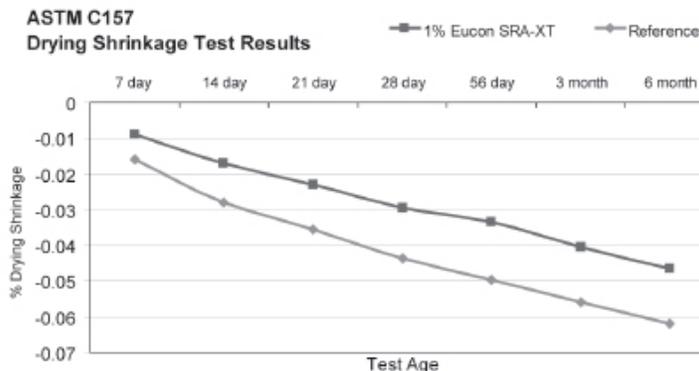
Specific gravity.....1.002  
Flash point ..... 220°F (104°C)

Color..... brown  
Odor..... mild odor

#### Physical Testing Properties:

Relative Durability Factor (ASTM C666): 92%

Salt Scaling (ASTM C672): Achieved equal salt scaling resistance compared with the reference concrete mix.



Cement content - 517 lbs/yd<sup>3</sup> (307 kg/m<sup>3</sup>)  
W/C = 0.50  
Air Content = 7.4%  
Slump = 5 1/4" (130 mm)

## PACKAGING

EUCON SRA-XT is available in bulk, 275 gal (1041 L) totes, and 55 gal (208 L) drums.

## SHELF LIFE

2 years in original, unopened container.

## SPECIFICATIONS/COMPLIANCES

EUCON SRA-XT admixture is currently meeting the requirements of ASTM C494/C494M and AASHTO M-194 as a Type S admixture.

## DIRECTIONS FOR USE

For use in air entrained applications, especially those exposed to severe freezing and thawing environments and deicing salts, a maximum EUCON SRA-XT dosage of 1% by weight of cementitious is recommended. When used for non-air entrained concrete, such as interior applications, it is acceptable to use at a dosage of up to 2% by weight of cementitious materials.

When an air entraining agent is used, it should be introduced within the first 50% of water and aggregate addition (before the introduction of the cement). This will allow the air void system to develop before the addition of other chemical admixtures, such as superplasticizers, and EUCON SRA-XT.

Add EUCON SRA-XT after all admixtures have been introduced into the mix. It is also recommended to allow enough mixing time of all other admixtures before the addition of EUCON SRA-XT to ensure concrete homogeneity. The design water of the concrete mix should be adjusted to account for volume of EUCON SRA-XT added in order to maintain required water:cement

EUCON SRA-XT is compatible with all cementitious materials that meet current ASTM C150 standards and all air entrainers, retarders, accelerators and water reducers provided by The Euclid Chemical Company.

### **THE AIR ENTRAINING DOSAGE MUST BE DETERMINED THROUGH PERFORMANCE TESTING FOR EACH INDIVIDUAL MIX DESIGN AND SET OF CONCRETE MATERIALS.**

\*Note: Whenever switching from a mix containing EUCON SRA-XT to one that does not contain EUCON SRA-XT, it is strongly recommended to rinse out each truck to provide consistent air content between batches.

## PRECAUTIONS/LIMITATIONS

- EUCON SRA-XT has a flash point of 220°F (104°C). EUCON SRA-XT must be handled with care and must not be subjected to excessive heat or be placed in the presence of an open flame or sparks.
- EUCON SRA-XT may reduce compressive strength up to 10% depending on the concrete mix design.
- EUCON SRA-XT has a potential for set time increase and delayed bleed. Set time increases can be exaggerated by lignin and naphthalene based admixtures. The use of polycarboxylate based admixtures will help to minimize the set time increase of concrete treated with EUCON SRA-XT.
- When additional workability is required, it is recommended that you use the Plastol line of admixtures
- Proper curing methods are required when EUCON SRA-XT is present in the mix. It is highly recommended that concrete treated with EUCON SRA-XT be treated with sheet goods or at a minimum a curing compound meeting the requirements of ASTM C1315.
- In all cases, consult the Safety Data Sheet before use.

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