

SRA-157 is a liquid shrinkage-reducing admixture which can be used in any Portland cement based product to significantly reduce drying shrinkage.

SRA-157 is not expansive material, but rather functions by blocking capillaries of pore water, which is the major mechanism that causes drying shrinkage in concrete.

SRA-157, when added to concrete at a rate of 2% by weight of cementitious material, can reduce shrinkage by up to 80% at 28 days of age and by up to 50% at one year of age.

APPLICABLE STANDARDS

SRA-157 meets or exceeds the requirements of ASTM C 157.

ADVANTAGES

- High level of shrinkage reduction that can eliminate cracking due to drying
- Reduces potential for cracking
- Improves aesthetics
- Increases water tightness of the mix
- Improves durability of the concrete
- Reduces creep and curling of the slabs
- Decreases carbonation at the surface of slabs

COMPATIBILITY

SRA-157 is compatible with all types of Portland cement, class C and F flyash, silica fume, fibers, approved air entrainers, water reducers, mid-range water reducers, corrosion-inhibitors, superplasticizing admixtures. For best results, each admixture must be introduced separately into the concrete mix.

DOSAGE RATES

SRA-157 is recommended for use at a dose of 1.0% to 2.5% by weight of cementitious. For maximum effectiveness use 2% by weight of cementitious. For example: a mix containing 600 lbs./yard, 2% equates to 12 lbs./yard. The shrinkage reduction is generally linear within the recommended dosage range, so any dosage within this range can be selected based on the degree of shrinkage reduction desired.

For best results **SRA-157** should be independently introduced in to the mix at the end of the batch cycle. Different sequencing could be incorporated if local testing shows improved performance.

Because local job conditions vary, contact your local GRT technical service representative for further assistance if using this product outside the recommended dosage ranges or when combining with other admixtures.

TECHNICAL NOTE

SRA-157 does not contain calcium chloride or any chloride-based components. It will not promote or contribute to the corrosion of reinforcing steel in concrete.

SRA-157

Shrinkage-Reducing Admixture

MIX WATER ADJUSTMENT

A water adjustment must be made to allow for the **SRA-157** in the mix. The water in the mix should be reduced by as much as the volume added through the addition of the shrinkage-reducing admixture.

EFFECT ON FRESH CONCRETE

If **SRA-157** is substituted in the mix with an equal amount of water reduced, there is little or no effect on the slump. The initial set times are typically retarded by about one hour and will improve slump retention. Air entrainment dosage requirements need to be increased when incorporating **SRA-157** to reach normal air contents.

EFFECT ON HARDENED CONCRETE

SRA-157 significantly reduces drying shrinkage, consequently reduces cracks or possibly eliminates cracks. Compressive strength may be slightly less than normal. It is reasonable to expect a 0 to 10% strength loss, but this is usually not an issue. For mixes where strength must be maintained, a mid-range water reducer such as **KB-1200** or superplasticizers such as **PC-3000** can be incorporated to reduce water to offset any strength reduction.

TECHNICAL SERVICE

General Resource Technology has trained representatives as well as technical consultants available to all specifiers and users to assist with field use and promotion, specifications, and dispenser services. General Resource Technology highly recommends that these services be utilized to ensure maximum performance and benefit while using **SRA-157**.

STORAGE TEMPERATURE

SRA-157 is a potentially combustible material with a flash point of 97°C (207°F). This is substantially above the upper limit of 60°C (140°F) for classification as flammable material, and above the limit of 93°C (200°F) where DOT requirements would classify this as a combustible material. Nonetheless, this product must be treated with care and protected from excessive heat, open flame, or sparks. For more information consult the Material Data Safety Sheet.

PACKAGING

3.5 gal. pails, 5 gal. pails, 55 gal. drums and 275 gal. totes

SHELF LIFE

18 months