

SRA-100 SHRINKAGE REDUCING ADMIXTURE FOR CONCRETE

SPECCO SRA-100 is a specialty liquid admixture specifically formulated to reduce drying shrinkage in concrete mix designs. Drying shrinkage of concrete is known to be associated with the surface tension of the mix water and the related capillarity they form when curing. **SRA-100** works by lowering the surface tension of the water and reducing the corresponding strain forces pulling on the water during drying. Typical uses include concrete structures or environments that are susceptible to high degrees of drying shrinkage such as bridge decks, parking garages, silos, floors, walls, piers, water tanks, pipe and related precast.

BENEFITS:

- Reduces ultimate shrinkage values by up to 50% depending on cement type used.
- Minimizes related cracking from chemical or drying shrinkage.
- Decreases maintenance costs of the structure.
- Increases long term durability.

LEED CREDIT CONSIDERATIONS: Materials and Resources: **MR Credits 5.2:** Regional materials- Greater than 20% extracted, processed & manufactured regionally at production location: Kankakee, Illinois 60901, 90% Content- Harvested within 500 miles

COMPOSITION: Proprietary solution of modified propylene glycols with hydration aids. **SRA-100** does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel or contribute to efflorescence.

TECHNICAL DATA: SPECCO SRA-100 is formulated to comply with ASTM C-157 specifications.

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PHYSICAL PROPERTIES at 70°F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	8.71 +/- 0.20
pH:	7.00 +/- 0.20
Color:	Clear pink liquid
Viscosity-Brookfield:	100 cps +/- 10 cps

RECOMMENDED ADDITION RATES: Typical dosages in standard mix designs for the *SRA-100* are between 16-32 ounces / cwt of cement (1045-2090 ml/100kg) for maximum effectiveness. The exact quantity of *SRA-100* required will vary due to differences in the concrete materials or pour field conditions. These include but are not limited to: ambient and mix temperatures, cement, sand and aggregate gradation and ratio, additional admixtures in the mix, slump, water content, and temperature, mix time and mixer type, means of conveying and placing, as well as vibration method and duration. Specco recommends a trial mix be conducted with actual production materials in order to determine the optimum dosage for specific set time or strength requirements. Once this dosage is established, frequent checks should be made during the placement of the concrete to ensure related air entrainment levels and compressive strengths are maintained.

DIRECTIONS FOR USE: Additional admixtures, including air entraining agents and superplasticizers used in the concrete mix along with **SRA-100** should be added first to establish correct concrete mix uniformity. The pre-measured amount of **SRA-100** selected should be added to the reduced batch water if possible to allow maximum dispersion during the mixing process. **The recommended minimum mixing time is 90 seconds for ideal dispersion throughout the concrete mix. SRA-100** has a limited plasticizing effect on the mix due to the lowered surface tension, so the required batch water may be lowered accordingly to maintain proper slump and consistency. **SRA-100** is compatible and can be used with any cement-based materials, as well as with the full range of most chemical admixtures.

CAUTIONS: Since **SRA-100** decreases the surface tension of the mix, it will tend to increase the total air content in the mix. Therefore, the dosage of any air entraining agents used should be reduced accordingly to ensure proper air content. **SRA-100** is designed for use in warm to moderate weather conditions, and is not recommended for cold weather concrete pours (below 50°F). **SRA-100** may also







reduce the final compressive strengths of the mix design from 0 to15% depending on the materials used. There are typically slight retardation effects on finishing or final set times of approximately 30 minutes at the dosages suggested, and the *SRA-100* will correspondingly extend slump life for this time frame. *SRA-100* is fully effective and compatible in concrete with other admixtures including chloride and non-chloride-based accelerators. However, each admixture should be added separately to the concrete mix, and it should be noted that any separate admixture addition may alter the amount of air entrainment obtained. *SRA-100* will freeze at approx. 32°F (0°C) but may be completely restored by thawing above 32°F (0°C) and thoroughly mechanically agitating before use. Do not use pressurized air for mixing or agitation. *SRA-100* should be stirred before using if the material has set for an extended period (3-6 months).

GHS HAZARD RATINGS: WARNING



WARNINGS: IRRITANT: REFER TO PRODUCT S.D.S. (SAFETY DATA SHEET) FOR FIRST AID INFORMATION, OR ANY RELATED HEALTH AND SAFETY INFORMATION BEFORE USING THIS PRODUCT. FOR MEDICAL EMERGENCIES ONLY, CALL INFOTRAC AT 800-535-5053

H.M.I.S. CODES: HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, PERSONAL PROTECTION = C (GLOVES, GOGGLES, APRON)

SHIPPING NAME: Concrete Admixture – Water-based -Not regulated

SHIPPING CLASS: NMFC 33880-02, Freight Class 55

STORAGE: Ideal storage is between 60°F to 80°F. Keep from freezing.

SHELF LIFE: 1 year stored properly. Depending on storage conditions, the shelf life may be extended.

PACKAGING: 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers.

LIMITED WARRANTY: This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product.

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