



ORIGINAL #19R

VISCOSITY MODIFYING CONCRETE ADMIXTURE WITH SET TIME RETARDATION

PRODUCT DESCRIPTION: *Specco Original #19R* admixture is a neutral, biodegradable, liquid chemical additive designed to offer delayed working and setting times of concrete or cement-based mix designs in hot weather conditions. The viscosity modifying properties add lubricity to extruded mixes and allow lower water to cement ratio mix design options in warm or dry weather conditions. Additionally, these beneficial properties reduce surface bleeding, segregation, shrinkage and overall cracking that can occur in high slump mixes poured in the same comparable conditions.

BENEFITS AND FEATURES

EXTENDED WORK TIME: *Original #19R* allows initial and final set time retardation for extended workability and placement of cement mixes in hot, dry, windy temperature extremes.

BLEED/SEGREGATION CONTROL: *Original #19R* decreases surface water bleeding and improves aggregate suspension due to its gelling action. The hydration water is held integrally in the mix (not pushed to the surface), resulting in concrete or overlays with reduced capillarity, improved workability and cohesiveness.

SHRINKAGE CONTROL: *Original #19R* stabilizes the concrete mix and therefore decreases shrinkage potential or surface cracking common in wet mixes or in cement overlays placed in hot, windy weather environments.

EASIER FINISHING: *Original #19R* aids surface finishing in flatwork by holding the hydration water in the matrix for extended times with minimal effects on set time. This allows for easier troweling with less drag or pull on the concrete and stronger compaction at the surface.

EASIER PLACEMENT: *Original #19R* reduces splashing during concrete placement and adds workability to the concrete without added vibration or screeding. *Original #19R's* hygroscopic gelling action retains moisture and provides a creamy uniformity to the mix.

DECREASED PERMEABILITY: *Original #19R* provides a volume stabilized "closed cell" concrete structure less susceptible to water intrusion. This results in decreased surface damage from continuous freeze-thaw cycling and increased resistance to attack by deicing chemicals.

IMPROVED SURFACE APPEARANCE: *Original #19R* intensifies color shades in decorative mixes containing iron oxide colorants resulting in improved appearance, uniformity and easier mixer clean out. Streaking, shade variations and efflorescence formation are reduced or eliminated.

MIX STABILITY: *Original #19R* provides controlled rheology and volume stability to high slump or S.C.C. modified concrete during transport and placement to prevent segregation and bleed.

COMPOSITION: Viscosity modified gluconate based solution. *Original #19R* does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel, or contribute to efflorescence.

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

PHYSICAL PROPERTIES at 70° F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	8.30 +/- 0.50 lb./ gallon
pH:	8.00 +/- 0.50
Color:	Clear-pale yellow liquid
Viscosity –Brookfield:	650 +/- 50 cps

TECHNICAL DATA: *Original #19R* is formulated to comply with **ASTM C-494 Type B** guidelines.



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RECOMMENDED ADDITION RATES: Concrete: Dosage of **Original #19R** varies from 3-16 ounces per 100 lbs. (196-1045 ml per 100 kg) of cement depending on the mixer type, mix design component levels, water to cement ratio and additional admixture requirements. **Specco recommends a starting dosage of 3-4 ounces per 100 lbs. of cement (196-259 ml per 100 kg) of cement, with increasing amounts as needed for delayed set or to control surface bleed water. Overlays: Dosage of Original #19R is recommended at 7-8 ounces per 50 lbs. of bagged overlay,** and should be added in tandem with to the premeasured mix water. 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. The dosage will vary with jobsite temperature, air movement, concrete temperature and mass, mix design components or other admixtures, as well as sun exposure or wind-break protective measures used. Refer to **Cautions Section** for additional information.

DIRECTIONS FOR USE IN AUGER MIXERS: **Original #19R** may be dispensed with automatic liquid dispensers but may require a typical 1:1 to 1:2 by volume dilution rate with water for proper flow consistency depending on diameter of tubing. Refer to **Specco's Admixture Tank calibration sheet** for proper dilution ratios.

DIRECTIONS FOR USE IN PADDLE, RIBBON, OR PAN STYLE MIXERS: Mix concrete with or without additional plasticizers or air entraining agents to the desired consistency (See Cautions Section below). Add the required amount of **Original #19R** as needed to help bind excess bleed water in the mix, producing a creamy mix consistency. Add **Original #19R** solutions slowly to the mixer at the end of the mixing cycle (while agitating) to avoid higher air entrainment levels.

CAUTIONS: **Original #19R** is compatible with most other admixture types; however they should be added separately to the mix to avoid any possible chemical interaction. For example, air entraining agents based on vinsol resin and superplasticizer based on naphthalene-sulfonate are not compatible in the same admixture tank with **Original #19R** however; they can be added separately if needed. **Original #19R** contributes to air entrainment levels. Specco recommends that any separate air entraining agent additions to the concrete mix should be reduced at least 50% when using **Original #19R** and the resulting mix should then be checked for accuracy to stay within the desired level. NOTE: Due to the viscosity modifying characteristics of **Original #19R** and the effects on water permeability, air entrainment levels measured by the standard pressure volume meter may not be accurate, and should be re-checked by weight difference interpolation versus a control.

GHS HAZARD RATINGS: WARNING:



Irritant: Possible Eye Irritation

FIRST AID: Refer to product S.D.S. (Safety Data Sheet) for complete 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 by D.O.T / **SHIPPING CLASS:** ITEM 33880, SUB 2, Freight Class 55

PACKAGING: 1 gallon (3.78 L), 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers.

STORAGE: 40° to 90° F. Protect from freezing and excessive heat. / **SHELF LIFE:** 1 year properly stored

WARRANTY: Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. **SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME.** If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. **Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages.** Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. **Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes.** Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. **Revised 11-04-19**



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