## #1920 AUGER AID® WATER REDUCING ADMIXTURE FOR VOLUMETRIC MIXERS

**PRODUCT DESCRIPTION:** #1920 Auger Aid® is combination water reducing, plasticizing, and viscosity-controlling admixture formulated primarily for mobile mix or continuous "auger" type concrete mixers. #1920 Auger Aid® contains a low range water reducer which allows increased compressive strength and durability of the cured concrete. Additionally, the formulation contains a viscosity modifier which reduces excess surface bleed water and aggregate segregation, and prevents false set of the concrete in the auger between discharges.

## **BENEFITS AND FEATURES**

**LOWER (W/C) WATER TO CEMENT RATIO:** #1920 Auger Aid® works effectively by dispersing the cement particles so less water is required for flowability and placement. By lowering the (W/C) water/cement ratio, the concrete mix will generate higher compressive strengths with less potential for surface damage.

**EASIER PLACEMENT:** Due to the dispersing and viscosity control action of #1920 Auger Aid® on the cement, the added workability helps extend the placement (open) time of the concrete without added vibration or screeding. #1920 Auger Aid® helps prevent false set of the concrete in the auger cycle, which can happen in warm weather, with faster setting mix designs or if interruption occurs during placement.

SHRINKAGE CONTROL: #1920 Auger Aid® decreases surface water bleeding and resulting concrete shrinkage. The water of hydration is held integrally and not pushed to the surface adding workability and cohesiveness to the plastic concrete. A volume stabilized "closed cell" concrete structure results, which is less susceptible to water permeability and shrinkage cracking in weather variations. This in turn decreases freeze-thaw damage potential (surface scaling) and increases resistance to attack by deicing chemicals.

**EASIER FINISHING:** #1920 Auger Aid® reduces splashing during concrete placement and aids surface finishing in flatwork by holding the hydration water in the matrix for an extended period. This allows easier troweling with less drag or pull on the concrete and stronger compaction at the surface.

**COLOR CONSISTENCY:** When added to integral colored mixes, #1920 Auger Aid® will reduce color variations or streaking problems caused by vibration and segregation. When used in other decorative work such as extruded curbing or pre-cast roof tile production, #1920 Auger Aid® provides color uniformity and minimizes efflorescence (salting) potential.

**COMPOSITION:** Viscosity modified lignosulfonate based solution. #1920 Auger Aid® does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel, or contribute to efflorescence.

PHYSICAL PROPERTIES at 70° F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	8.70 +/- 0.3
pH:	8.7 +/- 0.25
Color:	Dark brown liquid
Viscosity-Brookfield:	650 cps +/- 100 cps

**TECHNICAL DATA:** #1920 Auger Aid complies with ASTM C 494 Type A and AASHTO M-194 specifications for water reducing admixtures. Independent ASTM C-494 laboratory test data is available upon request.

**RECOMMENDED ADDITION RATES:** Adding #1920 Auger Aid® at a rate of 8-16 ounces per 100 lbs. of cement (522-1045 ml/100kg) can give approximately 10%-15% water reduction depending on the desired slump or consistency. It is recommended that a trial mix be conducted with actual production materials in order to determine the optimum dosage for specific set time or strength requirements. A starting point dosage of 8 ounces per 100 lbs. of cement (522 ml/100kg) along with corresponding 10% water reduction is suggested, increasing in gradual amounts if required.

**DIRECTIONS: FOR USE IN AUGER MIXERS:** Due to the various brands of volumetric mixers available and their respective admixture metering and delivery systems, please refer to our Admixture Tank Calibration sheet for suggested dilution and calibration tips. **FOR USE IN PADDLE, RIBBON, OR PAN STYLE MIXERS:** #1920 Auger Aid® can be used effectively in these mixer types as well, and should be added to the mix with the first half of the reduced mixing water. The recommended minimum mixing time is 90 seconds for ideal dispersion throughout the concrete mix.

**CAUTIONS:** #1920 Auger Aid® is compatible with most other admixture types however they should always be added separately to the concrete mix to avoid any possible chemical interaction. For example, air-entraining agents based on vinsol resin and superplasticizers based on naphthalene sulfonate are not compatible in the same admixture tank with #1920 Auger Aid®, however, they can be added separately if needed. #1920 Auger Aid® is miscible (compatible) with most chloride and non-chloride based accelerators, but these should also be added in separate admixture tanks if possible. #1920 Auger Aid® is designed for use in warm to moderate weather conditions, and is not recommended for cold weather concrete pours (below 50° F) unless a separate accelerator is added to the mix for increased set time assistance. There are typically no retardation effects on finishing or final set times except in colder temperatures.

#1920 Auger Aid® contributes slightly (approx. 2-3 % at 8-12 oz./cwt cement) to final air entrainment levels. For higher levels (6-8%) of air entrainment, the use of #1915 Auger Aid is recommended. Any separate air entraining agent additions made to the concrete mix (such as should be reduced at least 50% from their normal dosage when using #1920 Auger Aid®, and the resulting mix should then be checked for accuracy to stay within the desired target levels. NOTE: Due to the viscosity modifying characteristics of #1920 Auger Aid® 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 or volumetrically. Avoid excessive vibration when using #1920 Auger Aid®, which can decrease the resulting concrete air content and may generate increased surface defects or aggregate segregation, especially in precast related work. #1920 Auger Aid® 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. #1920 Auger Aid® should be stirred before using if the material has set for an extended period (3-6 months).

**WARNINGS:** Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from food and drink. Do not take internally. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. For medical emergencies only, call Infotrac 800-535-5053.

H.M.I.S. CODES: HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, P. PROTECTION = C.

**STORAGE:** Ideal storage is between 60° 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.