SURFACE TECH

2020 REARM HR - AQU XP Polymer Fiber (38mm)
Data Sheet

Materials:

Aramid Fiber Reinforcement. Provide AQU XP Polymer Fiber treated with a proprietary liquid binder blend creating a temporary or fugitive coating on the loose aramid fibers. Design asphalt mix without aramid fiber and do not alter the final mix design (JMF) for the addition of aramid fiber at the plant. Use a minimum dosage rate of 2.8 oz. (single dose) coated weight per ton of asphalt mix (of which 2.1 oz. is pure aramid) and a maximum dosage rate of 5.6 oz. (double dose) coated weight per ton of asphalt mix (of which 4.2 oz. is pure aramid) depending on the mix design for the ARMI Interlayer product. The tolerance for AQU XP Polymer Fiber addition shall be no less than 2.6 oz. coated weight (2.0 oz. pure aramid) and not more than 5.2 oz. coated weight (4.0 oz. pure aramid) per ton of asphalt mix. Please note that AQU XP Polymer Fiber contains 75% pure aramid fiber and treated with a proprietary liquid binder blend creating a temporary or fugitive coating making up the other 25% of the total weight. This treated, aramid fiber remains in the form of fiber strands with over 9 million individual fibers / plant ton mix that is easily conveyed to the asphalt mixing drum. In the mixing drum, the fugitive coating evaporates at 100 degrees F allowing the aramid fibers to disperse into the asphalt mix.

Material Properties:

Material	Aramid (75% by weight)
Treatment	Fugitive Binder (25% by weight)
Length	1.5" (38mm)
Form	Liquid Bound & Cut Fiber Clips
Color	Yellow
Specific Gravity	1.44 g/cm3
Fiber Tensile Strength	400,000 psi
Fiber Melting Temperature	932 F

Bituminous Mixing Plant:

AQU XP Polymer Fiber Supply System. Add treated aramid fibers manually or through specialized equipment that can accurately proportion or meter the proper amount per batch for batch plants, or continuously and in a steady uniform manner for drum plants.

Batch Plant. When a batch plant is used, add AQU XP Polymer Fibers to the RAP or aggregate in the weigh hopper if possible. Dry mix time in the PUG mill may need to be increased to ensure that the aramid fiber is uniformly distributed with the aggregate prior to the introduction of the liquid AC.

Drum Plant. When a drum plant is used, inject the treated aramid fibers through the RAP collar by feeding them through an automated or manual aramid fiber feeder. The aramid fiber feeding rate shall be controlled by plant production rate producing asphalt mix. The automated or manual aramid fiber feeder must be properly calibrated for treated aramid fiber and deliver the treated aramid fiber continuously in a steady uniform manner.

Store the AQU XP Polymer Fibers 40 lb. boxes in a cool and dry environment. Tarp the pallets if left outside during production.

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