

CELLULOSE-POLYMER COMPOSITE ADDITIVE

APPLICATIONS

iFiber CPW is a reliable, highly efficient composite additive, designed for asphalt mixes with a high binder content, offering an innovative, environmentally friendly, and economical alternative for asphalt concrete modification.

ADVANTAGES

- Using iFiber CPW in asphalt mixes offers several advantages:
- **Binder Stabilization:** iFiber CPW prevents the asphalt binder from draining off or separating from aggregates, ensuring a consistent and uniform coating. This stabilization ensures that the binder remains in place, contributing to a thicker film around the aggregates.
 - **Increased Productivity:** A short opening time of iFiber CPW allows for quicker incorporation of cellulose fibers and polymers into the mix. This advantage can enhance overall production speed, leading to higher output rates and reduced operational costs;
 - **Improving Flexibility:** iFiber CPW enhances the ability of the asphalt to absorb and recover from stress and deformation.
 - **Reduced Thermal Susceptibility:** iFiber CPW lowers the degree of thermal susceptibility, which helps the asphalt maintain its performance across a range of temperatures.
 - **Improved Resistance to Deformations:** The additive increases the asphalt's resistance to permanent deformations and stress, reducing the likelihood of issues such as rutting.
 - **Better Adhesion:** It enhances the adhesion of the binder to the aggregate, contributing to a more durable and cohesive asphalt mix.
 - **Environmental Benefits:** As an innovative and environmentally friendly alternative for asphalt modification, iFiber CPW supports sustainable construction practices.
 - **Cost-Effectiveness:** By improving the performance and longevity of asphalt concrete, iFiber CPW can lead to cost savings over the lifespan of the pavement through reduced maintenance and repair needs.
 - **Versatility:** It is suitable for a variety of mix types, including semi-open, open, and SMA-type mixtures, offering flexibility in application.

METHOD OF USE

iFiber CPW should be added directly in to the mixing plant during a loading of aggregates to the mixer, by an automatic dosing plant. It is required a dry mixing time about 7-10 sec.

DOSAGE

The amount of iFiber CPW required is normally between 0,5% and 0,7% of the weight of the aggregates. This amount may vary, however, after carrying out laboratory tests during the design phase of the mixture.

COMPOSITION

Pellets of cellulose fiber and polymer.

PHYSICAL-CHEMICAL CHARACTERISTICS

PELLET’S PHYSICAL PROPERTIES

Appearance	pellets
Diameter	4-7 mm
Colour	From grey to brown
Apparent Density	0,35 ÷ 0,40 g/cm ³

FIBER’S PHYSICAL PROPERTIES

Average length	> 200 µm
Average diameter	> 7 µm
Resistance to temperature (weight loss @ 220°C)	< 4 %
Ash content @ 500°C	15÷25 %
Humidity	< 5,0 %
Absorption in oil	≥ 6 times fiber's weight

PHYSICAL-CHEMICAL CHARACTERISTICS

POLYMER'S PROPERTIES	Softening Point	150 ± 20 °C
	Melt mass-flow rate (MFR)	
	@190°C g/10 min at 2.16 kg	0,8 ± 0,3

STORAGE

iFiber CPW should be stored for 24 months in it's original package sheltered from water and humidity.

PACKAGE

The product supplied in 500 kg Big-bags.

WARNING

For further information on the classification, protection measures and measures in case of fire, please refer to the safety data sheet, available at request.