

POLYACRYLONITRILE FIBER

The polyacrylonitrile Fiber is an advanced organic fiber aimed at the modern projects and constructions. Comparing with polypropylene fiber, it has larger elastic modulus, higher tensile strength, anti-ultraviolet properties, high temperature resistance and resistant to low temperature. As the secondary reinforcement rebar of cement concrete and asphalt concrete, it can obviously improve the tensile strength, fatigue resistance and bending resistance, and obviously improve the initial anti-cracking of the concrete.



★TECHNICAL PARAMETER

Material	100% Polyacrylonitrile	Shape	Monofilament sarciniform
Density	1.19g/cm ³ ± 0.05	Diameter	12-20μm
Tensile strength	≥600Mpa	Elastic modulus	≥5000Mpa
Melting point	235-245°C	Elongation at break	10%-40%
Acid and alkali resistance	Excellent	Safety	Non-poisonous
Length	6mm,9mm,12mm,19mm	Color	Light yellow

★FUNCTION AND FEATURES IN CONCRETE

★Function in the cement concrete

- Greatly improving the anti-cracking of the cement concrete
- Greatly improving the anti-permeability and frost resistance
- Reducing the concrete brittleness
- Improving the wear resistance, tensile strength and toughness
- Improving the impact resistance, anti-seismic and crazing resistance

★Function in asphalt concrete

- Improving the dispersant effect of asphalt mixture
- Taking the role of reinforcement rebar effect in the mixture
- Increasing the oil rate of the asphalt concrete, improving the adhesion strength and stability

- Improving the toughness and low temperature resistance of asphalt concrete
- Improving the skid resistance and wear-resistance
- Reducing the effect of temperature to the asphalt pavement

★PACKAGE

- 0.9kg or 1kg/small plastic bag, then 25kg/big woven bag
- 200kg/big woven bag
- Making the packing according to the customer request.

★SUGGESTED DOSAGE

- For the cement concrete: same dosage with the polypropylene fiber
- For the asphalt concrete : same dosage with the polyester fibers

★APPLICATION

- Application in the cement concrete
- Concrete forecast, concrete elements and other concrete products
- Cement concrete road pavement, bridge pavement, airport runway.
- Sea port, deep -water wharf and the projects in cold area.
- Highway anti-collision retaining wall, Shock damper
- Reservoirs, swimming pools, corrupt pool, sewage tank
- The concrete-faced rockfill dam of hydraulic engineering and hydropower engineering
- The basement wall, bottom plate, roofing plate and so on.
- The Shotcrete and pumping concrete

