

POLY FIBER P.P.

Polypropylene Fibrillated Fibers

PRODUCT DESCRIPTION

POLY FIBER P.P. Polypropylene fiber is a low density fiber that quickly and easily mixes with the concrete mass creating a very effective multidirectional secondary reinforcement.

The use of **POLY FIBER P.P.** will greatly reduce the formation of plastic shrinkage cracking by increasing the tensile capacity of the paste fraction of the concrete.

This reduction of plastic cracks enables the concrete to develop its optimum design strength.

POLY FIBER P.P. is most often used as an alternative system to secondary wire mesh in slab on grade and large area of casted Concrete.

POLY FIBER P.P. will provide better impact, abrasion and shatter resistance, it will reduce permeability, increase freeze-thaw resistance and in addition, increase toughness and durability

TYPICAL APPLICATIONS

- Slab on grade.
- Drive ways and parking lots
- Sidewalks & Shot Crete Toppings.
- Septic Tanks & other prepackaged items.
- Water Channels.
- Concrete Canals.

PRODUCT FEATURES

- **POLY FIBER P.P.** is a 100% polypropylene fiber.
- Multifilament or collated Fibrillated Fibers.
- Fiber lengths range from 12.00 mm. To 19.00 mm.
- Additive included preventing ultraviolet degradation.
- High bond strength to concrete matrix.
- Excellent Fiber distribution.
- Alkali & acid resistance, will not corrode in the concrete.

PROPERTIES

Material

Poly propylene

SPECIFIC GRAVITY

0.90

FIBER TYPE

Collated Fibrillated

FIBER LENGTH

12.00 mm. To 19.00 mm.

TOXICITY

Non toxic

WATER ABSORPTION

Nil

ALKALI RESISTANCE

High

ACID RESISTANCE

High

THERMAL CONDUCTIVITY

Low

MILDEW RESISTANCE

High

ELECTRIC CONDUCTIVITY

Low

Color

White

MELT POINT

170 *C

IGNITION POINT

Over 590 *C

FIBER TAPE THICKNESS

0.0965 mm. ** 10 %

YOUNG S MODULUS

3600

PLASTIC SHRINKAGE

100% reduction of plastic shrinkage cracking.

FREEZE - THAW

High Resistance

CHEMICAL RESISTANCE

High Resistance To alkalis in concrete.

POLY FIBER P.P. does not induce the growth of bacteria and algae.

PERMEABILITY

Dramatically decrease concrete Permeability.

BOND STRENGTH

Increase the bond between concrete & reinforcing steel.

IMPACT RESISTANCE

Increase impact resistance of concrete.

COMPRESSIVE STRENGTH

Improves concrete compressive strength.

FLEXURAL STRENGTH

Increase flexural strength of concrete.

SPLIT TENSILE STRENGTH

Improves split tensile strength.

STABILITY

Is not effected by Ultra Violet Light.

STANDARDS

POLY FIBER P.P. is tested to the appropriate sections of the following Standards:

ASTM D-1204, ASTM D-638

GUIDE FOR APPLICATION

PROCESSING

POLY FIBER P.P. is packed in per measured bags with required projects size, ranging dose starts from 0.8 Kg Per cubic meter.

Add **POLY FIBER P.P.** into the mixer and mix for 4-5 minutes or 60-70 revolution at full speed to insure uniform distribution.

PLACING / FINISHING

Fiber reinforced concrete may appear slightly stiffer than plain concrete without affecting workability, it increases the concrete cohesive properties.

However, if additional workability is required, a water reducer or super plasticizer should be used instead of adding water.

This increase in cohesion will also reduce segregation, resulting in less or slower bleeding. With this in mind, it is important not to begin finishing too early.

GUARANTEE / WARRANTY

We warrant our products to be of good quality and manufactured to rigid standards. This warranty is in lieu of any and all other warranties expressed or implied.

This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose.

POLYCOO services are free and the company dose not accepts liability for any loss arising from it.

TECHNICAL SERVICES

For any further technical advice and recommendation for the use of all **POLYCOO** products, please consult the nearest **POLYCOO** technical office.

Finishing is accomplished best with steel or magnesium trowels and floats, wooden tools open the surface and may expose additional fibers. Also, it is not recommended to use a tin.

Rake to move or place fiber reinforced concrete. The tins can disrupt the fibers uniform three dimensional distributions.

For exterior textured or broom finishes, use a dry stiff bristled broom.

If you require any special application please consult, **POLYCOO** – Technical department for dosage rate.

PACKAGING

Normally 0.9 kg. Per pack.



Under technical collaboration with

Polycoo Industries Ltd.

Sole distributor in Egypt: Polycoo Company

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