

Synthetic Polypropylene Macro Fibers



Product Description

- **GTS PL-830** Fiber® is a monofilament polypropylene Synthetic fiber used as concrete flexural and slab on grade reinforcement. and to reduce the occurrence of plastic shrinkage and plastic settlement cracking, whilst enhancing the surface properties and durability of hardened cementations products.

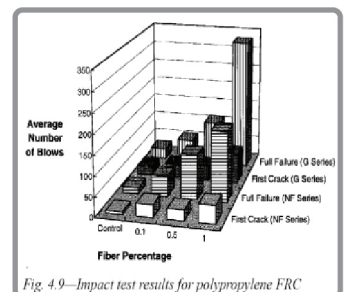
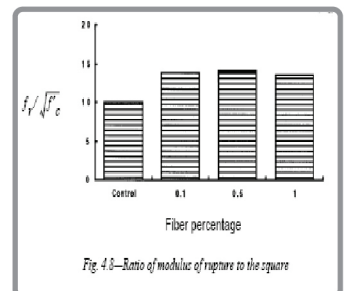
Where to Use? **GTS PL-830** Fiber® are used in the following applications:

- Slab on grade and screed.
- Airport Runways and Taxi ways.
- Factory floors, High impact and fork lift truck areas.
- Driveways, parking lots, roads, highways, bridge decks.
- Quays, landing strips.
- Live stock areas.
- Chemical plants.
- Tennis courts.
- Subterranean walls.
- Shotcrete.Toppings, gutters and concrete pipes.
- Concrete tiles and architectural panels.
- Rock and stabilization projects.
- Mines, canals and tunnel linings.
- Precast concrete.



Why ? **GTS PL-830** Fiber®

- Used to replace steel bar, steel mesh and steel fiber in slab on grade and screed.
- Time saving and less labour (Much more economically)
- Resists crack, reduce breakage and chipping
- Reduce plastic shrinkage and drying shrinkage.
- High resistance to static loads and friction loads.
- Gives higher bond based on his serrate shape.
- Will not rust (No corrosion).
- Chemically stable in alkaline and oxidizing.
- protect edges and corners
- Enhances flexural strength.
- Enhances compressive strength
- Enhances splitting tensile strength
- Enhances impact strength.
- Enhances first crack strength.
- Enhances toughness
- Enhances ductility and durability



Standards **GTS PL-830** Fiber® is manufactured to

- ACI 360. R - 06 Design of slabs on ground
- ACI 544. 1R - 96 report on fiber reinforced concrete
- ASTM C 94 - Standard Specification for Ready - Mixed Concrete
- ASTM C 1116 - Standard Specification for Fiber Rein forced Concrete and shotcrete
- ACI 318M - 05 Building Code Requirements for Structural Concrete

Product Data

Base	100% Virgin Polypropylene
Color	White
Design	Monofilament Fiber
Fibre Length	30 & 50 mm
Width	1.0 / 1.3 mm
Thickness	0.30 / 0.50 mm
Packaging	5.0 Kg of fiber are packed in either plastic bags

Technical Data

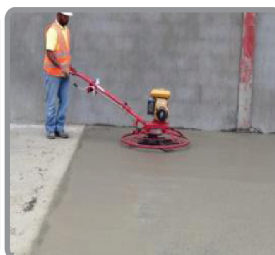
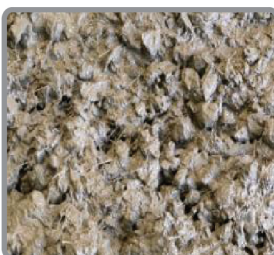
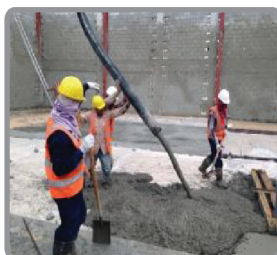
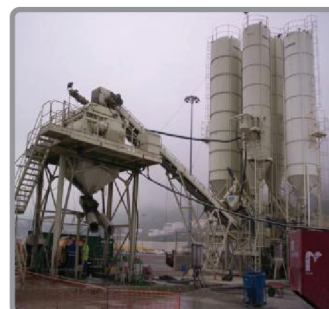
Density	0.90 grm/ cm3
Water Absorption	0.01 - 0.02
Ignition Point	590 °C
Crack Tensile Strength	450 / 500 Mpa
Young's Elastic Modulus	3.5 KN/mm2
Compressive Strength	550/800Mpa

Application

Dosage ■ The recommended dosage rate is 3.0 kg to 5.0 kg per cubic meter of concrete

Method of statement

- Add the synthetic fiber reinforcement in the mixer or the central concrete mixer and thoroughly mix concrete.
- Mix of synthetic fiber reinforcement in concrete mixer for a minimum of 5 minutes at maximum mixing speed in accordance with ASTM C 94
- Make sure that the slump test not more than 120 mm.
- No need to redesign the mix design.
- No need to add water and comply with the mix design.
- No specialized labor is needed.
- Make sure to distribute fiber in a uniform way in the mixer



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