



PRODUCT DATA

Multi-Mix 80™ MicroFiber

Description:

Multi-Mix 80™ MicroFibers - Engineered Fibrous Concrete Reinforcement System - 100 per cent virgin homopolymer polypropylene multifilament fiber containing no reprocessed olefin materials and specifically engineered and manufactured for use as secondary reinforcement in ready mix concrete and cement-based building products. One pound (.45 kg) of Multi-Mix 80™ MicroFiber contains over 80 million individual multifilament fibers. Multi-Mix 80™ MicroFiber provides secondary reinforcement and helps to protect concrete from stresses which can cause cracking when concrete is most vulnerable - during the first 24 hours after placement. Multi-Mix 80™ MicroFibers meet the material specifications described in ASTM C-1116, Type III, Section 4.1.3 "Synthetic Fiber-Reinforced Concrete and Shotcrete".

Function:

- * Reduces in-place cost versus welded wire fabric when used for secondary (crack control) reinforcement in concrete; inhibits the formation of cracks caused by intrinsic stresses
- * Increases impact, shatter and abrasion resistance of concrete
- * Reduces segregation, plastic settlement and shrinkage cracking
- * Reinforces against water migration; reduces permeability of concrete

Benefits:

Multi-Mix 80™ MicroFibers reduce in-place cost versus welded wire fabric when used for non-structural secondary temperature and shrinkage crack reinforcement in hardened concrete. Saves construction time & money by eliminating purchase, storage, handling, cutting, placing and waste of welded wire fabric - Always positioned in compliance with codes, automatically - Requires no minimum amount of concrete cover - Safe and easy to use - Will not rust or corrode; chemically inert - Non-magnetic - 100% Alkali proof - Provides long term durability.

Applications:

Multi-Mix 80™ MicroFibers can significantly enhance the performance of all types of concrete and cement-based building products:

Examples:

Slab on Grade	Precast	Driveways	Stucco	Maintenance Jobs
Sidewalks	Curbs	Overlays/Toppings	Walls	Slope Paving
Tilt-up Panels	Thin Sections	Exosed Aggregate	Pool Decks	Mortar

Mixing Requirements and Application Rates:

The standard range of addition for Multi-Mix 80™ MicroFibers is 0.5 to 3.0 lbs per cubic yard / .30 kg to 1.78 kg per cubic meter of concrete added directly to the concrete mixing system before, during or after the batching of the other ingredients and mixed at the time and speed recommended by the mixer manufacturer (usually three to five minutes at high speed). Typically, .5 lbs per cubic yard / .30 kg per cubic meter of Multi-Mix 80™ MicroFibers provides excellent results. Additional mixing does not adversely affect the distribution or overall performance of Multi-Mix 80™ MicroFibers. The addition of Multi-Mix 80™ MicroFibers at the recommended dosage rates to a given mix may appear to decrease the slump. The workability, however, will not be affected and additional water should not be added. Contact your local PSI Fiber™ Representative for alternate dosage rates used in specialty applications.

Chemical and Physical Properties:

Material	100% Virgin Polypropylene		
Fiber Length	1/2" (13 mm)		
Absorption	Nil		
Specific Gravity	0.91		
Fiber Denier	4		
Melt Point	320°F - 340°F (160°C - 170°C)	Acid / Salt Resistance	High
Ignition Point	1,100°F (590°C)	Thermal Conductivity	Low
Alkali Resistance	100% (alkali proof)	Electrical Conductivity	Low

Mix Designs:

The addition of Multi-Mix 80™ MicroFibers at the normal recommended dosage rate does not require any mix design changes.

Finishing:

Multi-Mix 80™ MicroFiber reinforced concrete can be finished by any finishing technique. Multi-Mix 80™ MicroFibers do not affect the finishing characteristics of concrete. They are non-corrosive, alkali proof and will not stain the concrete surfaces. Multi-Mix 80™ MicroFibers are compatible with power troweled, hand troweled, colored, stamped, dry shake and broom finished concrete.

Compatibility:

Multi-Mix 80™ MicroFibers are compatible with all concrete admixtures and performance enhancing chemicals.

Packaging:

Multi-Mix 80™ MicroFibers are supplied in pre-measured ready to use degradable bags. Multi-Mix 80™ MicroFibers are available in 1/2" (13 mm) length. Multi-Mix 80™ MicroFibers are packaged as follows:

.5 lb bags;	50 bags per box, 36 boxes per pallet, 1,800 bags per pallet, 900 net lbs
1.0 lb bags;	30 bags per box, 36 boxes per pallet, 1,080 bags per pallet, 1,080 net lbs
5.0 lb bags;	6 bags per box, 30 boxes per pallet, 180 bags per pallet, 900 net lbs

Specification:

Fibers shall be 100 percent virgin polypropylene containing no reprocessed olefin materials. Fibers shall have been engineered and manufactured for use as secondary reinforcement in ready mix concrete and cement-based building products. The fibers are to be used for non-structural temperature and shrinkage crack reinforcement in hardened concrete. One pound (.45 kg) of fibers shall contain no less than 80 million individual fibers. The required dosage rate shall be specified by the design engineer or architect. Standard ACI 302 procedures for placing, finishing and curing shall be followed when using Multi-Mix 80™ MicroFiber. The fibers must meet the material specifications described in ASTM C-1116, Type III, Section 4.1.3 "Synthetic Fiber-Reinforced Concrete and Shotcrete". The fibrous concrete reinforcement shall be manufactured by: PSI Fibers™, 1129 South Chattanooga Street, LaFayette, Georgia, 30728 (706) 638-0055 Fax: (706) 638-0057.

PSI Fibers™ Worldwide Headquarters:

PSI Packaging, Inc. 1129 S. Chattanooga St. LaFayette, GA 30741 (706) 638-0055 Fax: (706) 638-0057