

X-Mix PPF

High performance crack control micro fiber.

Product Description

X-Mix PPF are high performance polypropylene fibers, developed as a crack control fibers for cementitious materials. It is used to inhibit the formation of cracks which can occur through plastic shrinkage, premature drying and early thermal changes.

Advantages

- Cost effective
- Replaces anti crack mesh reinforcement
- Decreases construction time and labor
- Inhibits intrinsic cracking in concrete
- Disperses uniformly throughout the mix
- Do not rust
- Explosive spall control

Uses

X-Mix PPF is primarily used as a crack controlling fiber for cementitious materials. Typical applications are:

- Crack control in ready-mix concrete, precast concrete, conventional shot-Crete, screeds, renders, mortars, micro-silica concrete
- Concrete slabs, pavements, driveways, imprinted concrete
Explosive spall control

Laboratory Test Data

| | |
|-------------------------|---|
| Specific gravity | 0.6 - 0.9 g/cm ³ |
| Alkali content | Nil |
| Sulphate content | Nil |
| Air entrainment | Air content of concrete or mortar will not be significantly increased |
| Chloride content | Nil |
| Fiber thickness | 30 to 32 microns |
| Young's modulus | 5500 to 7000 MPa |
| Tensile strength | 350 MPa |
| Melting Point | 160°C |

Specification Compliance

ASTM C1116, Type III
BS EN 14889 – 2

Dosage

0.6 to 0.9 kg/m³ for concrete mixes
1 to 2 kg/m³ for explosive spall control in fire
2 kg to 10 kg/m³ for mortar mixes

Explosive Spall Control (Fire)

Section 6.1 of the European Standard EN 1992 Eurocode 2 states 2 kg/m³ of polypropylene fibers be used to control explosive spalling in high strength concrete as a result of fire. Lower dosages can be used but spalling resistance will have to be determined by specific fire testing.

Standard Lengths

6mm, 12mm, 19mm, 25mm, 30mm and 42mm.

Use at other dosages

Dosages outside the typical ranges quoted above can be used to meet particular requirements, Contact X-Calibur for advice.

Effects of overdose

Overdosing of X-Mix PPF will generally produce a reduction in workability, and an increase in the cohesiveness of the mix.

Dosing Instructions

Add directly with the bag to the mortar or concrete mix while being mechanically mixed either at the batch plant or the truck mixer.

Mix for a minimum of 5 minutes after addition of fibers to ensure complete distribution of the fibers.

Packaging

0.6 kg and 0.9 kg of fiber packed in water soluble paper bags for easiest mix.

Shelf Life

Indefinite when stored under shade in a dry environment.

Storage

Store under shade out of direct sunlight and below 40°C. Keep dry at all times.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.ncc.com.eg.

Authorized Technical Specialist

Please note that only NCC X-Calibur Authorized Technical Specialists (ATSSOs) are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.ncc.com.eg for a full list of NCC X-Calibur ATSSOs.

Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.ncc.com.eg to ensure you have the latest version.

Warranties

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

NCC

X-CALIBUR
CONSTRUCTION CHEMISTRY
233 industrial zone,
New Cairo, Cairo,
Egypt.

Quality Statement

All Products manufactured by NCC X-CALIBUR or imported from X-CALIBUR companies world-wide are manufactured to procedures certified to conform the quality, environment, systems described in the ISO 14001:2004. ISO 9001:2000.



Hotline: 16960

E-mail: Info@ncc.com.eg

Website: www.ncc.com.eg

www.x-calibur.us