

# KingFiber<sup>®</sup> PP50

High performance monofilaments polypropylene macro fiber.

## DESCRIPTION

KingFiber PP50 is a synthetic macro fiber manufactured of 100% polypropylene fibers containing no reprocessed olefin materials and with excellent alkali resistant, impermeable and non-corrosive properties.

The unique composition of KingFiber PP50 makes it an excellent alternative to the traditional reinforcement steel mesh in order to significantly reduce the plastic shrinkage cracking and enhance the durability and the mechanical properties of the cementitious mixes.

## APPLICATIONS

KingFiber PP50 is ideally designed to decrease the plastic shrinkage cracking in the following applications:

- ▣ Slab on grade.
- ▣ Elevated slabs.
- ▣ Parking areas.
- ▣ Stamped concrete.
- ▣ Pre-cast concrete.
- ▣ Water tanks.
- ▣ Pavements.
- ▣ Shotcrete.
- ▣ Renders.
- ▣ Composite decks.

## ADVANTAGES

- ▣ Controls and inhibits crack formulation caused by plastic shrinkage, settlement or other internal stresses in concrete.
- ▣ Cost effective, replaces secondary reinforcements steel mesh.
- ▣ High tensile strength.
- ▣ Easily distributed throughout the cementitious mix.
- ▣ Compatible with all types of cement and concrete admixtures.
- ▣ Rust free.

## STANDARDS

- ▣ KingFiber PP50 complies with the requirements of ASTM C1116, Type III.
- ▣ KingFiber PP50 complies with BS EN 14889-2 for structural use in concrete.

## TECHNICAL PROPERTIES:

Composition:	100% virgin polypropylene
Shape:	Monofilaments macro fiber
Specific gravity:	0.95 ± 0.05
Modulus of elasticity:	3.4 - 4.0 GPa
Absorption:	Nil
Melting point:	160°C
Ignition point:	580°C
Chloride content:	Nil
Sulphate content:	Nil
Alkali content:	Nil



## METHOD OF USE

### Mixing

KingFiber PP50 is added to the mixer before, during or after batching of concrete. The mixing time and speed should be as per ASTM C94. Before discharging the mixture, set the mixer at the maximum speed for 1 - 2 minutes to ensure uniform distribution.

## DOSAGE

Dosage of KingFiber PP50 will vary depending on the area of application and the required properties of concrete mixes.

Typical dosage is between 1.0 - 5.0 kg/m<sup>3</sup> of concrete.

Please contact KINGKRETE Technical Department for assistance in product optimization.

## PACKAGING

KingFiber PP50 is available in 6 kg bags.



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## STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

## HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

## QUALITY AND CARE

All products originating from KingKrete's Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

\* Properties listed are based on laboratory-controlled tests.

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## KingKrete-Qatar/KingFiber\_PP50\_02/v2/07\_18

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.