

Mapefibre NS18 Fibrillated

Fibrillated Fiber Reinforcement for Concrete

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapefibre NS18 Fibrillated fibrillated polypropylene microfibers are manufactured from 100%-virgin, polypropylene resins. The fibrillation pattern of *Mapefibre NS18 Fibrillated* improves the bonding between fibers and the concrete mixture, thus improving plastic-shrinkage control in concrete.

FEATURES AND BENEFITS

- Controls and reduces plastic shrinkage and settlement cracking in concrete
- Reduces bleeding
- Improves the resistance of the concrete surface to fire, impacts and abrasion, thus extending durability and service life
- Offers a uniform distribution throughout the mixture and excellent finishability
- Reduces permeability, thus improving the freeze/thaw resistance of concrete

APPLICABLE STANDARDS

- ASTM C1116, Type III
- ASTM D7508

WHERE TO USE

- Slabs on grade, sidewalks, residential driveways, overlays and toppings
- Footings and foundations
- Stucco
- Extruded curbs and gutters
- Precast concrete and prestressed beams

- Shotcrete and slope paving
- Composite steel decks

DOSAGE RATES

Mapefibre NS18 Fibrillated may be used starting from a dosage of 1.5 lbs. per cubic yard (0.9 kg per m³). However, the specific rate should be selected for a given application based on project specifications.

MIXING AND FINISHING

Mapefibre NS18 Fibrillated fibers are packed in water-soluble bags that can be added directly into the concrete mix. For better dispersion, it is recommended to introduce *Mapefibre NS18 Fibrillated* fibers into the mix during batching, and then mix them with the concrete at maximum speed for 3 to 5 minutes. It is not recommended to introduce *Mapefibre NS18 Fibrillated* fibers into the mix at the same time as the cement. It is possible to add the *Mapefibre NS18 Fibrillated* fibers into mixing drums already loaded with concrete, although it is not recommended to add fibers to concrete with slump lower than 3" (7.5 cm).

Typically, no modifications to the concrete's mix design are required when using *Mapefibre NS18 Fibrillated*, although the mixture with *Mapefibre NS18 Fibrillated* may appear stiffer than a non-fibrous mixture. If necessary, a water-reducing admixture can be used to obtain better workability.

MAPEI's Technical Services Department can provide support in selecting the appropriate *Mapefibre NS18 Fibrillated* dosage as well as best mixing and finishing practices.

Technical Data

Material	100%-virgin, fibrillated polypropylene
Absorption	None
Density	0.91 g per cm ³
Acid/alkali resistance	Excellent
UV resistance	Excellent
Melting point	329°F (165°C)
Electrical conductivity	Low
Alkali resistance	High
Standard length	3/4" and 1-1/2" (19 mm and 3.8 cm)

PACKAGING

Mapefibre NS18 Fibrillated standard packaging is 1.5-lb. (0.68-kg) water-soluble bags. Custom packaging and lengths are available according to project requirements.

The shelf life of *Mapefibre NS18 Fibrillated* is 3 years in unopened packaging.

ADDITIONAL INFORMATION

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

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For the most current product data and BEST-BACKEDSM warranty information,
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