MAPEFIBRE NS 12

12 mm monofilament polypropylene microfibres for concrete





CE
EN 14889-2

DESCRIPTION OF THE PRODUCT

Mapefibre NS 12 are 12 mm-long mono-filament, polypropylene microfibres. When added to concrete, **Mapefibre NS 12** improve the resistance of concrete to cracks caused by plastic shrinkage. The special "mono-filament" formation makes the dispersion and distribution within the concrete mix easier.

WHERE TO USE

Mapefibre NS 12 are recommended to improve the resistance of concrete to cracks caused by plastic shrinkage as well as the fire resistance properties and the durability of concrete. Moreover, the homogeneity of concrete during the pouring phase is enhanced:

- production of concrete used for industrial floors, airport forecourts and multi-storey car-parks;
- production of precast reinforced concrete panels and pipes and concrete elements;
- production of fire-resistant concrete.

RECOMMENDATIONS

The use of Mapefibre NS 12 does not offer any advantage from a structural point of view, and may not be considered as an alternative solution to metal reinforcement.

It is also necessary to ensure that the design of the concrete mix is correct to prevent cracking phenomenon, and that curing of the concrete is carried out accordingly to avoid sudden evaporation of the water from the surface of the cast concrete.

COMPATIBILITY WITH OTHER PRODUCTS

Mapefibre NS 12 are compatible with other admixtures used in the production of high-quality concrete, and especially with:

- acrylic-based super-plasticising agents from the **Dynamon** range, for an improved mix design, consistency and maintenance of workability;
- **Mapecure** range curing surface films, for correct curing of the concrete;
- **Mapecrete System**, innovative technology used in the production of concrete with volumetric stability;

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- **Mapeform Eco** and **DMA** stripping compounds, used for stripping concrete from moulds.

HOW TO USE

Add **Mapefibre NS 12** in the cement mixer together with all the other ingredients (cement, aggregates, water and admixtures). Mix until a homogenous blend is obtained.

CONSUMPTION

The normal dosage of **Mapefibre NS 12** is 600 g/m³, usually added to the concrete. Higher dosage can be used for special applications such as shotcrete or fire resistance.

PACKAGING

Mapefibre NS 12 are supplied in boxes with 30 degradable/pulpable paper bags, 600 grams each.

STORAGE

Mapefibre NS 12 may be stored for 36 months in their sealed bags. Protect from direct sunlight and rain.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefibre NS 12 is an article and referring to the current European regulations (Reg. 1906/2007/CE - REACH) does not require the preparation of the Safety Data sheet.

Where applying the product, it is recommended to wear gloves and goggles and follow the safety requirements of the workplace.

This product contains microplastics. The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council. The use of this product is allowed only at industrial sites (derogation 4a) and if during the intended end-use synthetic polymer microparticles result as permanently incorporated into a solid matrix (5c).

Avoid release to the environment. Collect spillage. Do not dispose of rinsing water into the environment. Dispose waste in accordance with the local rules.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
Length of fibres (mm):	12
Diameter (µm):	32 ± 1.6
Density (g/cm³):	0.91
Flame point:	+400°C
Melting point:	+160°C-170°C
Water absorption:	none

Resistance to alkalis, acids and salts:	high
Tensile strength (N/mm²):	400-500



Pouring concrete with the addition of Mapefibre NS12 to counter plastic shrinkage



Example of industrial flooring admixed with Mapefibre NS12

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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 or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

All relevant references for the product are available upon request and from www.mapei.com

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