

# Mapefibre NS12

## Mono-filament, virgin polypropylene fibres, 12 mm long, for concrete

### DESCRIPTION OF THE PRODUCT

**Mapefibre NS12** are 100% virgin mono-filament polypropylene fibres which are resistant to alkalis and which do not absorb water. They have been specially developed to reduce the formation of cracks induced by hygrometric shrinkage of the concrete at the fresh and hardened stages. The special "mono-filament" formation makes their distribution and position within the concrete mix easier, so that they are distributed uniformly, to create a particularly strong matrix which is resistant to the stresses induced by the setting and hardening process.

### WHERE TO USE

**Mapefibre NS12** are particularly suitable for the following:

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

### RECOMMENDATIONS

**The use of Mapefibre NS12 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 NS12** 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;
- **Mapeform Eco** and **DMA** stripping compounds, used for stripping concrete from moulds.

### HOW TO USE

Add **Mapefibre NS12** 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 NS12** is 600 g/m<sup>3</sup>, usually added to the concrete. Higher dosage can be used for special applications such as shotcrete or fire resistance.

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

Length of fibres (mm):	12
Density (g/cm <sup>3</sup> ):	0.91
Flame point:	+160°C-170°C
Melting point:	+400°C
Water absorption:	none
Resistance to alkalis, acids and salts:	high
Tensile strength (N/mm <sup>2</sup> ):	400-500

### PACKAGING

Maefibre NS12 are supplied in 600 grams water-soluble paper bags, with 30 bags in each package.

### STORAGE

Maefibre NS12 may be stored for 36 months in their sealed bags, in areas sheltered from the direct rays of the sun and from rain.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Maefibre NS12 is an article and referring to the current European regulations (Reg. 1906/2007/CE - REACH) does not require the preparation of the Material Safety Data sheet. Where applying the product, it is recommended to wear gloves and goggles and follow the safety requirements of the workplace.

PRODUCT FOR PROFESSIONAL USE.

### 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 web site [www.mapei.com](http://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 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](http://www.mapei.com). ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.***

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



BUILDING THE FUTURE