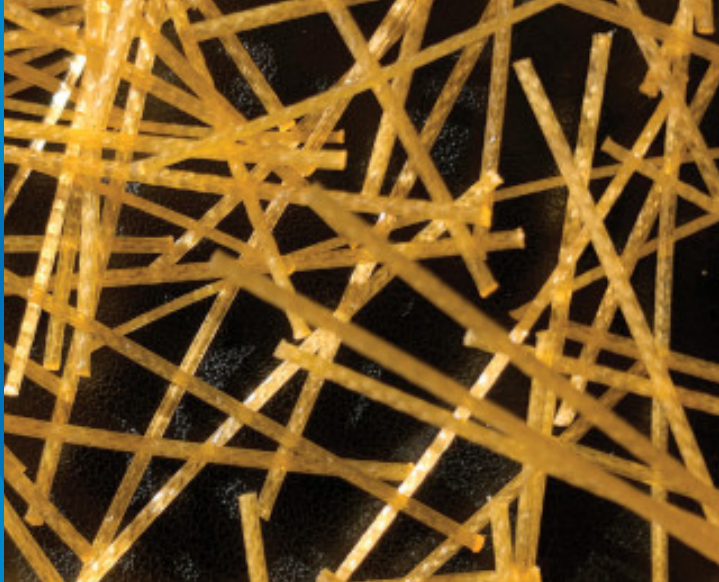


MAPEFIBRE MB 65

Structural polyolefin fibres for high-ductility concrete and shotcrete



DESCRIPTION

Mapefibre MB 65 are structural polyolefin fibres for the production of high-ductility fibre-reinforced concrete and shotcrete.

WHERE TO USE

- Shotcrete for initial and/or final linings in tunnels and structures below ground level.
- Concrete structures resistant to fire.
- Pre-cast concrete elements for final linings in tunnels, wells, etc.



Shotcrete with Mapefibre MB 65



Packs of water-soluble pucks



Entrance of a tunnel Shotcrete with Mapefibre MB 65

TECHNICAL CHARACTERISTICS

Mapefibre MB 65 have an embossed surface: this helps obtain a high level of adhesion in the cementitious paste, thereby increasing the ductility of concrete in the post-failure phase.

The type and special geometry of the fibres help maintain the workability of concrete compared with concrete mixes without fibres without modifying the rheological properties of the mix design. As well as these important advantages, the special shape of Mapefibre MB 65 fibres helps prevent them floating to the surface, particularly on large areas.

The exclusive use of virgin raw materials makes Mapefibre MB 65 fibres highly resistant to the attack from external agents, such as carbon dioxide and products containing chlorine. Mapefibre MB 65 polyolefin fibres are resistant to alkaline environments, which means they are compatible with the concrete mixes they are added to and, therefore, highly durable over the years.

Adding **Mapefibre MB 65** fibres is particularly recommended for shotcrete and precast concrete structures resistant to fire. In the event of fire, the polyolefin fibres in the cement matrix help reduce spalling; because the melting point of **Mapefibre MB 65** fibres is around 155-165°C, they are able to provide additional porosity within the cementitious matrix which allows vapours produced during a fire to expand, thereby reducing the pressure that builds up inside the concrete. Therefore, concrete strengthened with **Mapefibre MB 65** also forms a passive fire protection.

CONSUMPTION

Add **Mapefibre MB 65** fibres to the concrete at a rate of 1-5 kg per cubic metre, depending on the performance characteristics required.

PACKAGING

Mapefibre MB 65 fibres are supplied in water-soluble pucks in 6 kg plastic bags. Other sizes are also available upon request.

STORAGE

Mapefibre MB 65 fibres may be stored for 24 months in their original packaging away from rain and direct sunlight.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefibre MB 65 is an article and referring to the current European regulations (Reg. 1906/2007/EC - REACH) does not require the preparation of the Safety Data Sheet. During use wear protective gloves and goggles and follow the safety requirements of the workplace.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Fibre type:	flat embossed fibers
Length (EN 14889-2 paragraph 5.3.2):	65 mm
Equivalent diameter (EN 14889-2 paragraph 5.3.3):	0.85 mm
Melting point (ISO 11357-3):	+160°C
Density (EN 13392):	0.91 g/cm ³
Tensile strength (EN 10002-1):	540 MPa
Modulus of elasticity (EN 10002-1):	5500 MPa
Resistance to acids/alkalis:	total

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.

8687-2-2023-en

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

