

TechnoFiber™MSF

Macro Synthetic Reinforcing Fiber

TECHNOPOL

مقاوم سازی تکنوپل

PRODUCT DESCRIPTION

TechnoFiber™MSF is designed according to EN standards in dimensions for length, width, thickness, equivalent diameter and length / diameter ratio inclusive of linear density, shape of fibre, melting point and point of ignition. Inventory of test assessments and reports of tests of tensile strength of polymer macro fibres were conducted. Concrete and shotcrete mixing and compaction of the mix with fibers and curing of test samples complied with the requirements of EN14845.



Buildings
Structures



Transportation
Infrastructure



Water &
Wastewater



Oil, Gas &
Industrial



Waterfront
Structures



Industrial
Facilities

TECHNICAL DATA

	Unit	TechnoFiber™MSF
Chemical base		Polypropylene blend
Color		White-gray
Length	mm	30, 40, 50
Fiber's diameter		Different
Special Weight	g/cm ³	0.9
Tensile Strength	MPa	690
Water absorption		Nearly zero
Alkali/Acid resistance		Excellent
Storage Temperature	°C	10-35
Shelf life		2 years

ADVANTAGES

- Excellent resistance to acids and alkalis; rustproof
- Safe to use compared to steel fibers
- Resistant to corrosion attack from chlorides
- For shotcrete mixes, tunnels, slopes, concrete slabs, precast elements, pavements with high energy absorption.
- Flexural toughness efficiency

TYPICAL USES

- Parking decks
- Paver and driveway
- Highway and airport runway
- Tunnels, slopes
- Shotcrete, mine blocks
- Concrete slabs

- Lightweight concrete reinforcement
- Ground support slabs
- Bridge decks
- Refractory applications
- Strengthen resistant structures
- Industrial floors, loading docks

INSTALLATION PROCEDURE

DOSAGE

Standard recommended dosage rate of MRF™ is between 1-4 kg/m³ of concrete or as required by specific mix design.

MIXING

TechnoFiber™MSF can be added directly to the concrete mixing system (pumped, sprayed or placed using conventional equipment), during or after the batching of the ingredients and mixed at high speed for four to five minutes. Additional mixing does not adversely affect the distribution or overall performance of macro synthetic reinforcing fiber.

HANDLING

Approved personal protection equipment should be worn at all times. Particle mask is recommended for possible airborne particles. Gloves are recommended when handling mortar to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing /gloves /goggles. Ventilate area. In absence of adequate



ventilation, use properly fitted respirator.

STORAGE

Keep the macro synthetic reinforcing fiber in a dry place away from sources of heat in an original pack. Store in temperature between 10oC to 35 °C.

FAIRST AID

Skin

Wash fibers off skin with water and soap. If fibers are embedded in the skin, remove with tweezers. Discard clothing that may contain embedded fibers. Seek medical advice if exposure results in adverse effects.

Eyes

Immediately flush with a continuous water stream for at least 20 minutes. Washing immediately after exposure is expected to be effective in preventing damage to the eyes. Seek medical advice.

Inhalation

If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. If victim is not breathing, give artificial respiration. If there is breathing difficulty, give oxygen. Seek medical advice for any respiratory problems.

Ingestion

Ingestion is not a likely means of exposure for this product. If ingestion does occur, do not induce vomiting. Give nothing by mouth if victim is unconscious. Seek medical advice.

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