

MasterFiber[®] 241 SPA

Structural Macro Synthetic Fiber Reinforcement

Material Description

MasterFiber[®] 241 SPA, polipropilenden ekstrude edilmiştir. Yüzey kabartma işlemi uygulanarak betona olan aderansının artırılması sağlanmıştır. Fiberler, betona tokluk ve süneklik kazandırarak betonun performansının artmasını sağlar

EN 14889 – 2 standardına uygundur.

Areas of Application

MasterFiber[®] 241 SPA can be used in aggressive and corrosive areas requiring high chemical resistance thanks to its high alkali resistance. **MasterFiber[®] 241 SPA** fibers are recommended for use in the following applications:

- As reinforcement in wet and dry sprayed concrete applications,
- As a substitute for steel reinforcement in floor and road concrete,
- As reinforcement in structures that are continuously submerged in water.

Characteristics and Benefits

- Improves the ductility of concrete
- Transfers tensile stresses and bridges cracks in cementitious applications

- Decreases crack propensity due to constrained deformations induced by drying shrinkage and temperature gradients and allows to partially or fully substitute related mesh reinforcement
- Can be considered as structural reinforcement according to Model Code
- Excellent resistance in alkaline and acidic environment
- Provides rust free reinforcing solutions
- Easy to dose with limited impact on workability
- Safe to handle
- No negative impact regarding machinery wear

Dosing and Mixing

Appropriate fiber dispersion can be achieved either by adding the fibers to the aggregate belt or by adding the fibers via a sufficient dosing equipment directly into the mixer or ready mix truck to the already mixed concrete. While processing attention shall be paid that fibers do not separate or agglomerate (e.g. during discharge to mixer), regarding the latter one special care should be taken that fibers are added to zones with sufficient shear. Our recommendation is to continue mixing for minimum 90-120 seconds after the addition of fibers. Very high fiber dosages may require significantly higher mixing time in order to achieve sufficient fiber dispersion

Technical Properties

Structure of the Material	Polypropylene
Appearance	White
Specific Gravity	0,90 – 0.92 kg/m ³
Surface	Embossed
Shape	Flat
Fiber Length	40-48-54 mm
Tensile Strength	530-630 Mpa
Modulus of Elasticity	7.5 Gpa
Melting Point TS	Ca. 170 °C

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Dosage

The application dosage of **MasterFiber[®] 241 SPA** varies between 1.0 and 8.0 kg/m³ depending on the desired engineering properties of the fiber-reinforced concrete.

Processing

The fibers should be added to the concrete mixture after water and concrete admixture have been added. The mixture should be stirred at high speed for at least 5 minutes until a homogeneous mixture is achieved within the concrete.

Compatibility

MasterFiber[®] 241 SPA can be used in combination with all other MBT Tech concrete admixture products.

Packaging

MasterFiber[®] 241 SPA is available in 5 kg bags and 20 kg cartons.

Shelf Life

12 months if stored according to manufacturer's instructions in unopened container.

Storage

Store in original sealed containers and at temperatures between 5°C and 30°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

Health and Safety

For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapor until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

Contact

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