

Fibrillated polypropylene fibres for cementitious systems

Description of Product

RHEOFIBRE® 660 is a fibrillated polypropylene fibre that reduces the occurrence of plastic shrinkage cracking and plastic settlement whilst enhancing the surface properties and the durability of the hardened cementitious product. The fibres are cut to a length of 6mm and have a nominal thickness of 50 microns. The fibres are coated with a surfactant to improve dispersion and bond.

- Shotcrete/Gunite
- Repair materials

Features and Benefits

- Reduced plastic shrinkage cracks.
- Reduced plastic settlement.
- Reduced bleeding.
- Alternative to crack control mesh.
- Increased abrasion properties.
- Increased impact resistance.

Fields of Application

Principle uses of RHEOFIBRE® 660 include:

- Mortar and render
- Precast concrete
- Screeds

Technical Data/Typical Properties*

Specific gravity:	0.91g/cm ³
Alkali resistance:	100%
Acid resistance:	High
Diameter:	50 micron nominal
Absorption:	Nil
Constituents:	100% polypropylene
Fibre length:	6mm
Thermal conductivity:	Low
Electrical conductivity:	Low
Melting point:	160°C
Diameter in microns	50 microns nominal
Tensile strength	200 N/mm ² minimum value only
Spin finish	0.5 % +0.65 – 0.45
Moisture content	< 2%

* Properties listed are only for guidance and are not a guarantee of performance.

Application Procedure

Dosage Rate

0.91kg/m³

Dispensing

RHEOFIBRE® XT should ideally be added at the batching plant, although in some instances this may not be possible and addition on site will be the only option.

Wet Batch Concrete Plants

For wet batch plants, RHEOFIBRE® XT should be added to the concrete mixer with the other concrete ingredients.

If the fibre cannot be added to the pan mixer then the fibre should be added into the truck and the concrete discharged from the plant mixer on top of the fibre.

Dry Batch Concrete Plants

In dry batch plants RHEOFIBRE[®] XT should be added as the first ingredient into the truck mixer, followed by no more than a third of the mixing water and then the other ingredients ribbon fed into the mixer.

Please note that prior to discharge, the concrete must have been mixed for at least 70 drum revolutions at full speed.

Compatibility

RHEOFIBRE[®] 660 can be used with all types of cement and is compatible with other admixtures.

Specification

A polypropylene fibre with an individual fibre length of 6mm and a diameter of 50µm.

Packaging

RHEOFIBRE[®] 660 is available in degradable bags of 0.91kg, packed 14 to a box. A pallet contains 30 boxes.

Storage

RHEOFIBRE[®] 600 should be stored on a clean surface, in dry conditions under cover and away from the possibility of damage.

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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 vapour 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

"BASF Construction Chemicals (UK) Limited" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.