

Talrakfibstrand PP

Polypropylene monofilament microfibers for concrete and mortar



The Construction Alchemists

Description

Talrakfibstrand PP is a monofilament polypropylene fiber with properties suitable for use in concrete and mortar.

Features & Benefits

- Large fibre count per kg
- Chemically inert, does not corrode and durable
- Easy to mix in concrete and mortar
- When used in pumped concrete does not cause abrasion of pipe of concrete pump
- Alkali and acid resistant
- Reduces spalling of concrete in case of fire
- Reduces plastic shrinkage cracks
- Increases cohesion of concrete

Primary Application

Talrakfibstrand PP is used in:

- Concrete for floors and slabs to reduce shrinkage cracks, increase abrasion resistance
- Precast concrete to avoid cracking of elements during transport
- Plastering to avoid cracks due to shrinkage

Technical properties

Material type and structure	Polypropylene, Monofilament
Colour	White
Specific gravity	0.90
Length	6±1mm (other lengths are available on request)
Tensile strength	Min. 650 MPa
E-Modulus	4 GPa
Water Absorption	Nil
Chemical Resistance	Excellent resistance to acids and alkalis
Melting Point	165°C

Design Criteria

Talrakfibstrand PP can be used at a dosage of 150g/50 kg bag of cement and 900 g/m³ of mortar and concrete respectively. It can be used in flooring concrete to avoid shrinkage cracks obviating necessity of skin steel bar reinforcement. It can be used to avoid spalling of concrete in case of fire, as it melts at 165°C and creates many micro canals in the concrete allowing most of the water vapour to escape through the micro canals.

Application Instructions

- Talrakfibstrand PP can be added during mixing dry materials or to the wet concrete while mixing in a mixer. It can also be added into the transit mixers.
- When used in site mixed mortars, it can be added to the dry mix at a rate of 150g /50 kg bag of cement and mixed properly until all the fibres disperse into the mix uniformly followed by addition of water and mixing is continued.
- When used in concrete it can be added to wet mix at a dosage of 900g/m³ of concrete and mixing is continued until uniform dispersion. Talrakfibstrand PP does not form any lumps.
- Concrete with Talrakfibstrand PP will have a reduction in slump. Therefore it is recommended to be used with Talrakplast range of superplasticizers. A site trial is recommended.

Note: When Talrakfibstrand PP is used in batching plant, normal mixing time is sufficient. However, if used in transit mixers, mixing time should be increased at 1 minute per m³ of concrete at highest rotation speed.

Finishing

Finishing of mortars and concrete with Talrakfibstrand PP, shall be carried out in a way similar that followed in case of normal concrete. No any special tools are required for finishing.

Curing

Concrete and mortars mixed with Talrakfibstrand PP are cure either with water like normal curing or using Talrakcure range of curing compounds.

Estimating Packaging

Talrakfibstrand PP is supplied in 900g & 5kg polythene bags. Larger pack sizes can be provided on request.

Consumption

900 g/m³ of concrete or 150g/50kg bag of cement.

Storage

It is recommended to store under standard warehousing conditions i.e., dry covered area and avoid direct sunlight. Also protect it from fire.

Precautions

Health & Safety Instructions

Talrakfibstrand PP is a non-hazardous material. It must not be ingested. Normal safety and personal protection equipment such as gloves and goggles shall be used while handling the material.

Talrak



Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

Works:

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Important note :

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