



PRODUCT DATA SHEET

Sidhya® PP Fibre 20 Microns

Polypropylene fibers for Precast & Ready-mix Concrete production.

Description

Sidhya® PP Fibre 20 Microns is high performance fibre which increases the resistance to crack formation of concrete. The fibre acts as a crack controlling cementitious construction material by supporting its resistance to plastic shrinkage and early drying especially during high temperatures. Sidhya® PP Fibre 20 Microns has good dispersing properties and can easily be mixed in three dimensional directions in fresh concrete.

Applications

- The fibres can be used for screed mix designs to avoid plastic shrinkage.
- Used in high performance mortars.
- Several Ready mix concrete applications such as foundations, slabs and floors.
- Suitable for concrete in underground constructions.
- Suitable for tunneling and shotcrete applications.
- Suitable for precast concrete applications.
- Used in the production of sprayed concrete, high strength grout and mortars.

Mixing

Sidhya® PP Fibre 20 Microns should be batched along with aggregates in conveyor belts while loading in truck mixers or pan mixers. They can also be added in water soluble self-dissolving pouches during wet mixing in pan and truck mixer.

Dosage

The dosage of Sidhya® PP Fibre 20 Microns should be used in between 0.6 to 2.0 kg per cubic meter of concrete. To achieve optimum results, preliminary trials should be conducted.



Technical Specifications

Substance	Polypropylene
Color	White
State	Monofilament
Specific Gravity [g/c]	0.88 – 0.92
Metling Point [°C]	160
Ignition point [°C]	350
Diameter	20 microns
Available sizes	6, 12 & 18 mm

Test methods are available on request. For typical analysis of minor elements, please contact our Sidhya® Sales representative

Advantages

Sidhya® PP Fibre 20 Microns improves various durability properties of concrete by homogenously dispersing in fresh concrete. The following are the benefits of the product:

- Increase in early compressive strength of concrete.
- Improves the flexural properties of concrete.
- Increase in final strength of hardened concrete.
- Improves resistance to drying shrinkage and cracks in concrete.
- Improves the abrasion resistance of concrete.
- Improves the impact resistance of concrete.
- Enhanced resistance to acid and alkali attacks.
- Increases resistance to corrosion.
- Reduces the tendency of concrete bleeding and segregation.
- Improves fire resistance of concrete.

Compatibility

Sidhya® PP Fibre 20 Microns is compatible with all types of cement and binders such as Micro silica, GGBFS, Fly ash and Metakaolin.

Packaging

Sidhya® PP Fibre 20 Microns 600/900 grams, 18/30 kg bags. Please contact our Sales Representative for customized packing and more details

Technical Compliances

Sidhya® PP Fibre 20 Microns, conforms to the requirements of EN 14889-2



Storage

Sidhya® PP Fibre 20 Microns should be stored in dry conditions and not exposed to moisture and has shelf life of 1 year.

Legal Notice

The recommendations related to the application and recommendations are given in good faith based on Sidhya's current experience and knowledge of the products. The benefits stated about the product are only applicable if guidelines provided by Sidhya for storing, handling and mixing are followed under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product is always advised to test the product's compatibility and suitability for the intended requirements and application. Sidhya reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned copies of which will be supplied on request.

Sustainability, Health and Safety

End use of the product must read the Material Safety Data Sheet (MSDS) of the product. The MSDS provides information and advice on storage, handling and disposal of the product and instructions related to physical ecological, toxicological and other safety related data.

Product Data Sheet

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