BUILDING TRUST

PRODUCT DATA SHEET

SikaFiber® Econo-Net

(formerly MasterFiber® Econo-NET)

FIBRILLATED POLYPROPYLENE FIBER FOR CONCRETE APPLICATION

DESCRIPTION

SikaFiber® Econo-Net is a fibrillated polypropylene fiber designed for crack control and improved durability in concrete or shotcrete applications.
SikaFiber® Econo-Net significantly reduces the formation of plastic shrinkage cracks by increasing the tensile capacity of plastic concrete. Reducing the formation of microcracks prevents them developing into larger cracks during subsequent drying and shrinkage phases. SikaFiber® Econo-Net can be used as an alternative secondary reinforcement system to welded wire mesh in slab on ground applications.
Note: SikaFiber® Econo-Net does not replace structural reinforcement and hence cannot be used to increase shrinkage control joint spacings or decrease slab thickness.

USES

SikaFiber® Econo-Net is the ideal secondary reinforcement for:
- All concrete slabwork where crack control is a major requirement.
- Thin layer concrete overlays.
- Shotcrete applications.
- Kerbing or slipforming operations.
- Alternative secondary reinforcement to welded wire mesh for slab on ground applications.
- Shatterproof or impact resistant concrete.
- Precast concrete.

FEATURES

- Control plastic shrinkage cracking.
- Reduces concrete permeability.
- Improved shatter impact resistance.
- Thoroughly dispenses through concrete.
- Fibers are inert and non-corrosive.
- Safe and easy to use.
- Improves concrete cohesion for inclined and slip-formed placements.

PRODUCT INFORMATION

Composition	Polypropylene fiber
Packaging	0.9 kg/bag
Shelf life	12 months from date of production if stored properly in undamaged, unopened, original sealed packaging.
Storage conditions	Store in cool, dry conditions.
Length	19 mm
Density	0.905 gr/ml
Melting point	160 - 170 °C

Ignition temperature	Above 350 °C
Tensile strength	620 – 758 Mpa
Modulus of elasticity in tension	3.5 kN/mm²
Thermal conductivity	Low
Water absorption	Nill

APPLICATION INFORMATION

Recommended dosage	0.9 kg/m³ of concrete. Other dosages may also be used depending on the specific working conditions. Trial mixes should be made with job materials to determine the optimum dosage required for a specified job requirement.
Compatibility	SikaFiber® Econo-Net is compatible with all Sika admixtures. The action of SikaFiber® Econo-Net in concrete purely mechanical and will not affect the hydration process.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

DISPENSING

Put 1 (one) bag of 0.6 kg SikaFiber® Econo-Net per m³ concrete directly into the mixture. A mixing time of 3 to 5 minutes is necessary to ensure that the bag is fully degraded and ensure uniform fiber dispersion throughout the mix.
Concrete with SikaFiber® Econo-Net is placed and handled exactly as for plain concrete. Proper timing of the finishing operation is critical to minimise the “hairy con-crete” effect. Concrete with fibers tends to appear stiffer than it actually is due to the increased internal cohesion, and therefore the effect of the fibers on timing must be recognized. When power floating is used the machine should begin operation when the surface is dull, without bleed water, and can be depressed approximately 3 mm. At this time the powerfloat blades should be flat. During successive trowelling the angle of the blades should be slightly increased but the raise edges should never be more than 25 mm above the surface.
Finishing with a poer float at the correct timing (i.e. not too early) will ensure a surface as smooth and dense as that for plain concrete without fibers. Concrete with SikaFiber® Econo-Net is compatible with all concrete surface treatments :

- Power floated.
- Hand trowelled.
- Exposed aggregate.
- Coloured concrete.
- Dry shake surface hardener.
- Liquid hardeners.
- Concrete sealers.
- Stamped/ stencilled concrete.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. 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 must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. 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.

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