

DATASHEET

Concrist[®] ES



Product description

Concrist ES is a bi-component Macrofiber serving as a structural concrete reinforcement. The unique rough surface ensures superior bonding within the concrete, and the fiber bundles guarantee fast three-dimensional distribution throughout the matrix during the mixing process. The enhanced technical parameters of the concrete can be used for structural design purposes.

Concrist ES serves as a structural reinforcement, increases the impact resistance of the concrete, and can also be used in structural applications.

Concrist ES prevents sedimentation – the subsequent settlement of the matrix.

Concrist ES creates a high level of resistance for concrete structures exposed to aggressive water conditions.

Application

Concrist ES is used in tunnelling (shotcrete), prefabrication applications, slabs and concrete walls, industrial floors, outside standings, for concrete repair works, concrete piles, special foundation works and different special applications.

On the basis of Eurocode 2 and the Fibre Concrete Guidelines it is possible to prove the adequate structural strength of slabs, concrete fields, foundations, walls and other structures and eliminate the steel reinforcement partially or completely.

Dosage

The recommended approximate dosage for Concrist ES as a structural reinforcement is 2.0 to 7.5 kg/m³ of concrete.

Concrist ES is available in standard lengths of 50 mm.

Physical properties

| | |
|-----------------------------|------------------------------|
| Specification | Bi-component Macrofiber |
| Material | Polyolefine |
| Form | structured fibers in bundles |
| Bulk density | 0,91 |
| Length | 50 mm, tolerance +/- 5% |
| Number of fibers per kilo | ≈ 120'000 |
| Color | yellow |
| Resistance to acids/alkalis | inert |
| Tensile strength | ≈ 590 N/mm ² |
| Modulus of elasticity | > 11 GPa |
| Softening point | ≈ 150° C |
| Diameter | 500 µm |

Processing

The original mixing times of the individual concrete formulations for most products can be retained. Special mixtures for specific products may require an extension of the mixing time.

Concrix ES can be easily processed with commonly used additives.

Caution: The addition of Concrix ES will increase the rigidity of the concrete!

To optimize the desired placement consistency, use concrete plasticizer!
Do not add any additional water!

Before discharging fresh concrete on site, let the drum rotate again at maximum revolution for about 2 minutes.

Packaging

| | |
|------------------------------|--------------------------|
| Boxes | 8 bags of 3 kg = 24 kg |
| Pallets | 25 boxes / Pal. = 600 kg |
| Big Bags and other packaging | upon request |

Warranty

Concrix ES fulfills the standard EN 14889-2 according to system 1 and therefore guarantees a consistently high quality.

Contec Fiber AG does not have any control over production processes using Concrix ES. Therefore, Contec Fiber AG declines any liability for the associated end products.

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