

Shieldfibre UHPC15

Ultra-low Carbon Steel Fibre



MICSHIELD®

Description

Shieldfibre UHPC15 is a premium steel fibre sourced from recycled end-of-life tires. Designed specifically for concrete reinforcement, delivering high performance with an ultra-low carbon footprint. Its high tensile strength and average diameter of 0.27 mm enable the formation of a denser fibre network, making it possible to reduce the required fibre dosage per cubic meter of concrete.

Uses

- Industrial and Commercial Floors, warehouses, factories, showrooms.
- Pavements and Runways.
- Precast Concrete Elements.
- Shotcrete and tunneling, underground tunnels, retaining walls, slope stabilization.
- Infrastructure applications.
- High Performance Concrete (UHPC).

Typical Properties

Geometry	Random
Length (l)	15 mm
Average Diameter (d)	0.27 mm
Aspect Ratio	55 (l/d)
Average Tensile Strength	2.700 N/mm ²
Average number of fibres per kg	160.000
EPD Value	0.0436
Residual rubber content	1.2%

Characteristics / Advantages

- Made from recycled steel, resulting in near-zero carbon emissions with an EPD of 0.0436 kg CO₂e/kg.
- The high aspect ratio allows up to 160.000 fibres per kilogram, enhancing crack control, ductility, and stress resistance.
- Steel from end-of-life tires is repurposed, supporting a circular economy and reducing waste.
- It combines durability, safety, and cost-efficiency with sustainable performance.

Dosage

Dosages of 3 – 80 kg/m³.

Packaging

Shieldfibre UHPC15 is supplied in 10 kg bags.

Shelf Life and Storage

Shieldfibre UHPC15 has a shelf life of 12 months when stored in its original unopened packaging in dry conditions.

Shelf life may be reduced if the recommended storage conditions changed.

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