

# MasterFiber 343

Hybrid synthetic fibre for crack control in the early and late stages of cast and poured concrete applications

#### **Material Description**

MasterFiber 343 is a blend of engineered synthetic macro and microfibres to control early age and hardened shrinkage cracking. MasterFiber 343 has been developed to provide post-crack flexural strength to enable the replacement and/or supplementation of existing concrete reinforcement products.

#### **Areas of Application**

**MasterFiber 343** can be used in slabs-on-ground and precast concrete products.

Typical applications of **MasterFiber 343** include, but are not limited to, the following:

- Industrial and warehouse slabs-on-ground
- Residential and commercial slabs-on-ground
- Concrete pavements and footpaths
- Architectural precast panels

#### **Characteristics and Benefits**

- Improves concrete green strength
- Reduces plastic shrinkage and settlement cracking
- Enhances ductility, durability, and post-crack flexural strength
- Decreases construction time and overall labour and material costs
- Provides effective crack control

## **Properties**

#### Macrofibre

Material	Virgin Polypropylene	
Thickness	0.6 mm	
Width	1.2 mm	
Length	47 mm	
Tensile strength (EN14889-	550 MPa	
2)		
Modulus of Elasticity	10 GPa	
(EN14889-2)		
Density	0.91 g/cm <sup>3</sup>	
No. of fibres per box	112,000	

#### **Microfibre**

Material	Virgin Polypropylene	
Diameter	18 <i>μ</i> m	
Length	I2 mm	
Tensile strength (EN14889-	450 MPa	
2)		
Density	0.91 g/cm <sup>3</sup>	
No. of fibres per box	215,920,000	

### **Dosing & Batching**

The recommended dosage is I box of MasterFiber 343 (4.6  $kg/m^3$ ).

MasterFiber 343 is packaged in pre-weighed, ready-to-use, recycled cardboard boxes which are designed to be introduced at any time before or during mixing of the concrete. It is recommended to mix for at least 2-3 minutes to ensure even distribution of fibres within the concrete mix.



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## **Packaging**

I Pallet of MasterFiber 343 is made up of:

• 114 x 4.6kg mulchable boxes = 524.4kg per pallet

Each pallet is covered by a waterproof cover. The macrofibre component of **MasterFiber 343** is wrapped in water-soluble PVA to form bundles to improve dispersion.

### **Storage & Shelf Life**

MasterFiber 343 is to be stored undercover and protected from the weather.

#### Note

Field service support, where provided in no way constitutes supervisory responsibility. For additional information please contact your local Master Builders Solutions representative. MB Solutions reserves the right to have the true cause of any technical challenge determined by accepted test method.

#### **Disclaimer**

			MasterFiber-343-ANZ-V3-0924
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