KOREFIB s.r.o.

Technical Data Sheet KOREFIB® MacroFibers G40
TL-KOREFIB-G40-2025-01

Manufacturer:
KOREFIB s.r.o.
Borová 581/7, Bludovice, 736 01 Havířov
Company ID: 17587921 VAT ID: CZ17587921

Product Description:
KOREFIB® MacroFibers G40 are composite fibres based on ECR glass fibres and an epoxy polymer matrix, intended for distributed reinforcement of concrete, screeds, floor slabs and precast elements. The fibres are designed to transfer tensile stresses in concrete after crack formation, increase the toughness of concrete and its resistance to impact and fatigue, while limiting the formation of shrinkage cracks in the early stage of concrete hardening.
Thanks to a density similar to that of concrete, the fibres disperse evenly in the fresh mix, neither sinking to the bottom nor floating to the surface. The fibres can be used as secondary reinforcement or as statically effective distributed reinforcement, provided that their use is verified by structural calculation.

Property	Value	Unit	Test Method
Fibre length	40 ± 2	mm	
Fibre diameter	0,92	mm	ISO 10406-1, kap. 5
Number of fibres	≈ 20 000	pcs/kg	manufacturer's declaration
Average tensile strength	794	MPa	ISO 10406-1, kap. 6.4.3
Characteristic tensile strength	741	MPa	ISO 10406-1, kap. 6.4.3
Modulus of elasticity	26,9	GPa	ISO 10406-1, kap. 6.4
Elongation at break	3,07	%	ISO 10406-1, kap. 6.4.4 a 6.4.5
Tensile stiffness	18	kN	ISO 10406-1, kap. 6.4.4 a 6.4.5
Density	1,9 ± 0,2	g/cm³	
Resistance to alkaline environment	Ret = 88	%	ISO 10406-1, kap. 11
Consistency of fresh concrete	C2 / 1,25–1,11		EN 14845-1 at 7 kg/m³

Residual strengths at a dosage of 7 kg/m³:

Parameter	Value	Unit	Test Method
fL	2,6	MPa	ČSN EN 14651+A1
fR1	2,6	MPa	ČSN EN 14651+A1, CMOD 0,5 mm
fR2	2	MPa	ČSN EN 14651+A1, CMOD 1,5 mm
fR3	1,8	MPa	ČSN EN 14651+A1, CMOD 2,5 mm
fR4	1,6	MPa	ČSN EN 14651+A1, CMOD 3,5 mm

Declaration:
The KOREFIB® MacroFibers G40 product has been verified by tests performed by the TZÚS Praha, s.p. testing laboratory, Brno branch. Selected technical properties of the product were determined in accordance with ISO 10406-1, ČSN EN ISO 1172, ČSN EN 14651+A1 and EN 14845-1/2.

The stated technical properties are based on test results and the manufacturer's internal documentation. The values apply to the tested product and the stated test conditions. Use of the product in a specific structure must be verified according to the required fibre function, dosage, concrete mix design and loading.

Havířov, 9 June 2025