



From Project to jobsite

FIB-energy®

glass

GLASS-FIBRE BASED STRUCTURAL FIBRE FOR MORTAR AND CONCRETE VERY HIGH ZIRCONIUM CONTENT

Description FIB-Energy® Glass is a fiber of very high quality especially produced for the reinforcement cementitious matrix.

Advantages The high zirconium content (> 19%) makes FIB-energy® GLASS resistant to the alkalinity of cement. The strong adhesion to the cement matrix forms together with the high elasticity modulus allows obtaining structural values and the control of crack formation.

Method of use To be added to the cement matrix during the mixing phase, in a ratio of 5÷15 kg/m³, depending on the specific requirements.

Packaging Bags of 20 kg on pallet

Technical characteristics (typical values)	Zirconium content	>19%		
	Softening temperature	>800 °C		
	Density	2,7 kg/cm ³		
	Coefficient of thermal expansion	9 x 10 ⁻⁶ °C / °C		
	Tensile strength	1400 N/mm ²		
	Deformation to break	2%		
	Young Modulus	74000 N/mm ²		
	Alkali resistance : weight loss of the fibre (in saturated cement paste 80 °C during 200 hours).	<i>Fib Energy® Glass</i>	0,8 %	<i>std glass fibre</i> >10 %
		Remaining tensile strength of the fibre in cement paste at 50 °C during 300 hours in 100% relative humidity environment	75%	14 %
	Acid resistance : Weight loss of the fibre (80 °C for 90 hours in 10% HCl)		1,6 %	43%
		Weight loss of the fibre (80 °C for 90 hours in 10% H ₂ SO ₄)	1,2 %	42 %
	Diameter	14-18 micrometer		
Length	13-19-25 mm			

Safety indications Read carefully the safety indications on the packaging, or consult the relevant Material Safety Datasheet of this product.

The above data derive from our best actual practical and laboratory knowledge and are the result of applications of the product in different fields of use. Tecnochem Italiana cannot be held responsible for negative or inadequate results that are due to improper use of the product or due to causes unconnected to the quality of the product including the storage. The technical characteristics and performance contained in this datasheet are periodically updated. This datasheet replaces and supersedes the previous versions, and the data will be updated periodically. The revision data are indicated in the specific field. The site www.TECNOCHEM.IT contains the updated datasheets, updated in real time.