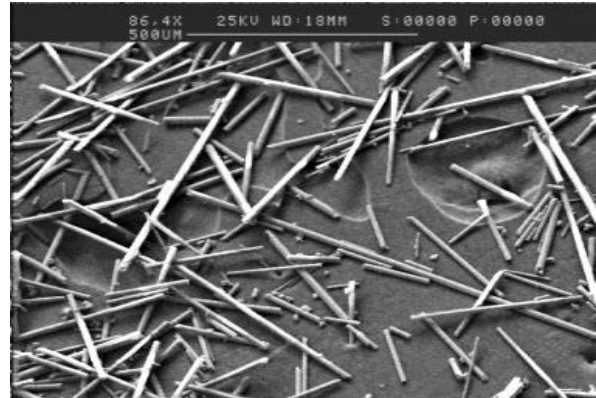


Technical Data Sheet **Milled Basalt Fibers**

High temperature resistant milled basalt fibers are obtained by milling basalt continuous filament fibers of the 10-17µm filament diameter range. Basalt has a thermal conductivity of 1.7 W/mxK. Which is 70-80% higher than E-glass. Basalt is a good electrical insulator, its electrical resistance is similar to higher than that of E-glass. Basalt's mechanical properties as breaking strength, E-modulus as well as its resistance to chemicals are superior compared to E-glass.



The good mechanical properties of BCF, the easy wetting of the filament surface and their recyclability make them particularly suitable for the composites application.

Milled basalt fibers can find applications such as filler in polymeric materials or concrete for improved heat dissipation and mechanical toughness – in sectors as production of electrical power cables & equipment, in construction.

Property	Standard/Method	Unit	Value	Tolerance
Base material				
Density of unsized filament matl		kg/dm ³	2.67	± 5%
Moisture content of basaltic rock		%	0.1	± 0.05
Melting point		°C	1350	± 100
Milled fibers				
Filament diameter range	ASTM D578-2000 - §26	µm	10-17	
Sizing type			Silane	
Length		µm	±100	
Sizing content	ISO 1887:1995	%	0.1 – 1.5	
Filament breaking load	ASTM D2256-97	cN/tex	>67 - 85	
Elongation at break		%	2.8	± 10%
E-Modulus		GPa	84	± 10%
Continuous max temperature		°C	350°C with stress 550°C w/o stress 1200°C fire blocking	
Moisture content (sized fibers)	ISO 3344:1997	%	less than 2.0	
Glow or ignition loss	ISO 1887:1995	%	0.1 – 1.5	
Combustibility	NF P92-503 (1995)	M0	Pass	
UV stability	ISO 105-B02		6	
Safety measure			Use breathing mask	

Packaging

The milled fibers, put in a PE bag for a weight of about 25 kg come in a cardboard box with identification label. Boxes are stacked up 3-4 high on a pallet, laterally wrapped in protective PE-foil and strapped to the pallet.

Product Stability:

BASALTEX™ Products have not been designed for full external exposure conditions and cannot be guaranteed for use in such situations. However, these BASALTEX™ products have considerable tolerance to damp conditions and occasional water immersion. After drying out, the product will give the same level of performance as the original sample.

Stability over time:

Said products not being subjected to excessive heat, wear and abrasion, all evidence obtained to date indicates that their performance should not significantly change over a significant period of time.

It is the responsibility of the developer of the end-product, finished device or system to test its performance in the end-application.