

4AC.099

Fabric – Glass - Untreated

Overview

E-glass fibre is valued for its resistance to high temperatures and its electrical insulation properties. This rot-proof material can resist chemical agents and remains stable against humidity and temperature variations. While glass filaments with a diameter of less than 3 µm are respirable and can build up in the respiratory system, filaments bigger than 9 µm can irritate the skin. To prevent these risks, only fibreglass products made of filament between 6 and 9 µm are used.

Technical Data

Properties		Unit	Value		
Material			E-glass		
Composition		%	SiO ₂ : 52-56 CaO: 16-25 Al ₂ O ₃ : 12-16	B ₂ O ₃ : 5-10 MgO: ≤ 5 Na ₂ O+K ₂ O: ≤ 1	F ₂ : ≤ 1 Fe ₂ O ₃ : ≤ 0.4 TO ₂ : ≤ 0.8
Temperature	Operating	°C	550		
	Peak		700		

General Data

Material	Thermal resistivity	Mechanical strength	Chemical resistance
Glass	★★★★★	★★★★★	★★★★★ Except for phosphoric and hydrofluoric acid

Applications

- Gasket
- Compensators
- Heat reflectors
- Curtains
- Blankets
- Protective clothing



Available fabrics

Thickness (mm)	0.14 ± 0.02	0.5 ± 0.05	0.75 ± 0.02	0.8 ± 0.02	1 ± 0.02	1.3 ± 0.02
Basis weight (g/m ²)						
124	1TEX018292 Plain					
300		1TEX002231 Plain				
400		1TEX008943 Herringbone 1/3				
610 ± 10				1TEX003594 Plain	1TEX002229 Plain	
650 ± 10			1TEX002213 Satin 1/7	1TEX002223 Plain		
700					1TEX002210 Vertical reps	
1,000						1TEX002201 Panama

Thickness (mm)	1.5 ± 0.05	1.6 ± 0.02	1.75 ± 0.02	1.8 ± 0.02	3.3 ± 0.02
Basis weight (g/m ²)					
950	1TEX002205 Broken twill				
1,030	1TEX002197 Plain		1TEX009216 Plain		
1,100		1TEX002185 Panama			
1,200 ± 50		1TEX002177 Panama		1TEX002181 Panama	
1,950					1TEX002175 Twill 2-2

The physical properties in this documentation are provided for informational purposes only and do not constitute a contractual commitment. Please contact our technical service if you require any additional information.

The fabrics are untreated or available with a vermiculite, silicone or an aluminised finish.

Vermiculite coating: This natural mineral is used as a coating on textiles. It enhances their resistance to abrasion and their ability to support peak temperatures.

Silicone coating: This polymer derived from silicon is used as a coating on textiles. It enhances a product's resistance to weather's conditions, aqueous solutions, weak acids and bases. Silicone coated fabrics should be able to withstand temperatures up to 250 °C.

Fabric with an aluminised side: When coated on one side of the textile, aluminium reinforces its resistance to radiant heat, flames and splashes of molten metal.