

Teknofibra®, thanks to carbon fibers which constitute the technological essence, has the following unique characteristics:

- Totally non-toxic and physiologically safe
- Does not burn
- It does not produce emissions toxic or harmful in case of fire
- Absorbs a high amount of moisture

Teknofibra is provided with a coating that is heat-reflecting / low-emissivity on one side and with the application on the opposite side of a special adhesive resistant up to 250 ° C.

For the realization of Teknofibra®, the carbon fibers undergoing an innovative process, which enables fundamental improvements:

- A significant reduction of the apparent density
- The reduction of the thermal conductivity from 0.4 to only 0.029 W/mK.
- A substantial increase in acoustic performance

The short fibers of carbon, thanks to Teknofibra®, now have a new scoreboard:

1.	Excellent flammability classification	-	S-a	-	EN 532, EN 533
2.	Good fire behaviour		Good		DIN 4102
3.	Thermal conductivity	λ	0,029*	W/mK	*) at 40°C, 0,022 at 0°C and 0,045 at 350°C. at pressure of 1013 mb. Are available the curves that relate the thermal conductivity at the pressure variation and moisture
4.	Low emissivity	ε	0,045	-	value mediated between the minimum of 0.035 and a maximum of 0.055 for a surface that has long remained exposed to high temperatures.
5.	Electrical resistance	Ω	10⁸	ohm/m	Unlike the carbon fibers that are excellent conductors, Teknofibra® is completely insulating.
6.	Electrical resistance	M Ω	>200	ohm	Annexed B, UNI EN 1869:2002
7.	Sound absorption	α	0,9	-	Apparent sound absorption according to ISO 354 at a frequency of 1 KHz relative to a mat of 25 mm without heat-reflecting film. The performance depends essentially on the frequency and application. We are at your complete disposal for detailed technical information.
8.	Density	ρ	73	Kg/m ³	Average bulk density of the fabric only. The adhesive and the film reflective determine an increase of the density of 370 g/m ²
9.	Constant volume with the variation of pressure	ΔV	0	-	Teknofibra® while having the performance of the best materials with closed cells, Teknofibra® is with cells open and this makes it dimensionally and structurally insensitive to pressure variations
10.	It does not release dust	-	-	-	Does not contain dust therefore there is no emission of dust with the rapid decrease of the pressure.
11.	High moisture absorption	$\Delta \rho$	>10	Kg/m ³	The capacity of the fibers to absorb a large quantity of water, allow to avoid the presence in the liquid state under conditions of condensation temporary or cyclic and preserve the thermal and acoustic characteristics.
12.	Does not burn	LOI	50	-	Teknofibra® it needs in order to be able to burn, the presence of 50% of oxygen in the air of combustion that it contains only 21%
13.	100% non-toxic	-	-	-	Teknofibra® guarantees maximum safety physiological
14.	It is stable at high temperatures	t	350	°C	Teknofibra® is indefinitely stable at the temperature of 350 ° C and withstands without serious structural alterations temperature peaks up to over 600 ° C.