

## SILPHON®FIBER LH / Dens 20

**SILPHON®FIBER LH** is a thermally insulating material and a sound absorber made of 100% polyester fiber thermobonded (Polyethylene terephthalate - Co-Polymer Polyethylene terephthalate) specifically designed for use in the railway sector.

The characteristic of thermobonding is the complete recyclability of the product and of its clippings; for this reason it can be considered to all effects 100% recyclable.

Not fraying and does not disperse into the environment powders, particles or fibrils potentially harmful to man: the average diameter of its fibers is 20,9 [µm].

**SILPHON®FIBER LH** has been designed specifically for particular applications where to the fibers is required a unique repellent action against water and oils.

The characteristic of thermobonding is the complete recyclability of the product and of its clippings: **SILPHON®FIBER LH** is 100% recyclable. On this feature we focus more and more also because the increasing interest in ecological purposes reduces the cost of disposing clippings.

The expected thermal conductivity of **SILPHON®FIBER LH** at a density of 20 Kg/m<sup>3</sup> is "λ" = 0,0370 [W/m°K].

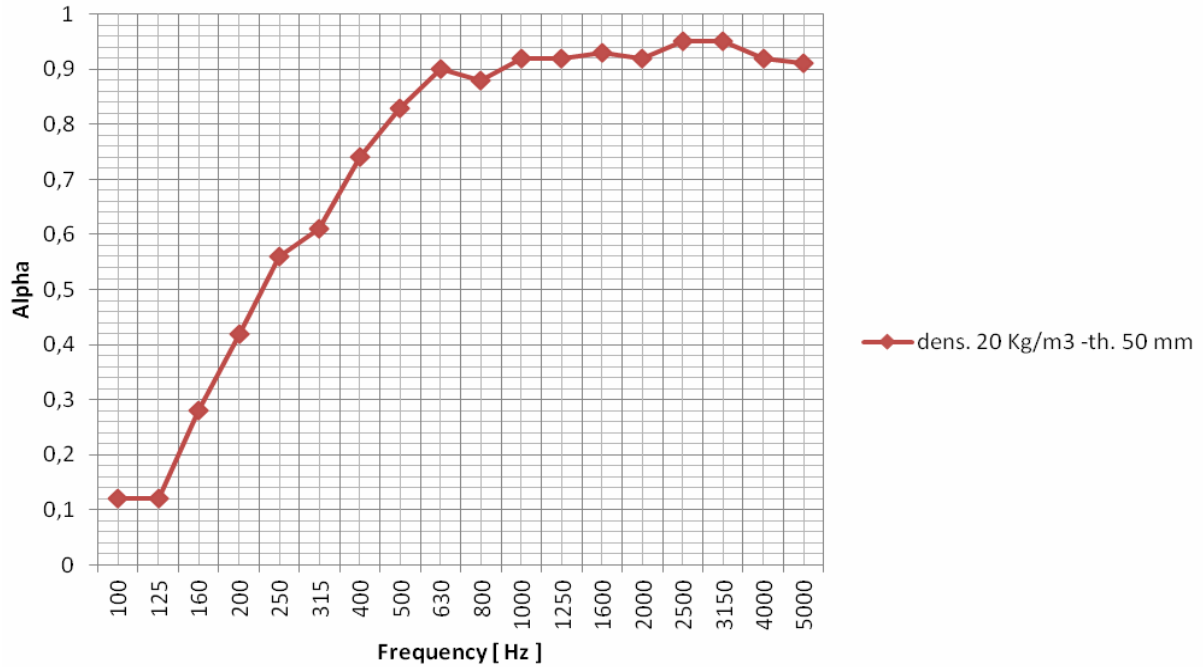
The expected sound absorption coefficient for **SILPHON®FIBER LH** density 20 kg/m<sup>3</sup> and thickness of 50 mm thick is exposed to third-octave band on the below graph.

<b>Composition</b>	Oleophobic polyester staple fiber – Bicomponent Polyester staple Fiber (Polyethylene terephthalate - Co-Polymer: Polyethylene terephthalate)
<b>Processing</b>	Carding, folding, thermobonding
<b>Main uses</b>	Thermal insulation and acoustic absorption in particular environments
<b>Surface mass</b>	From 200 up to 4000 gr/m <sup>2</sup> +/- 10%
<b>Thickness</b>	From 10 up to 100 mm +/- 5 mm
<b>Temperature range of use</b>	From – 40°C up to +100 °C
<b>Expected thermal conductivity</b>	"λ" = 0,037 W/(m°K) at 20 kg/m <sup>3</sup>
<b>Fiber diameter</b>	20,2 [µm] (calculated)
<b>Lower calorific value</b>	21600 Kj/Kg
<b>Specific Heat</b>	0,24 Kj/(Kg°K)

<b>Standard Production</b>		
Density: 20 kg/m <sup>3</sup> – roll	Thickness: Width of roll:	10 – 15 - 20 - 30 - 40 mm +/- 5 mm 1000 / 1200 mm +/- 5 mm
Density: 20 kg/m <sup>3</sup> – sheet	Thickness: Std dimensions of sheets:	From 25 up to 100 mm +/- 5 mm 2800 x 1200 mm

Die Angaben erfolgen nach bestem Wissen und technischen Kenntnissen. Vorbehalten bleiben Änderungen.

## Expected acoustic absorption SILPHON® FIBER LH



Die Angaben erfolgen nach bestem Wissen und technischen Kenntnissen. Vorbehalten bleiben Änderungen.