

# Material data sheet

Insulating strips of  
**Bio-based PA 410 GF25**

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## Insulating strips of Bio-based PA 410 GF25

Characteristic	Reference standard	Unit	Samples prepared from extruded insulating strips		Injection-moulded samples
			Dry <sup>(1)</sup>	Equilibrium moisture content <sup>(2)</sup>	Dry <sup>(1)</sup>
melting temperature	EN ISO 11357-3	°C	min. 240 <sup>(3)</sup>	min. 240 <sup>(3)</sup>	min. 240 <sup>(3)</sup>
density	EN ISO 1183-1 or -3	g/cm <sup>3</sup>	1.27 +/- 0.05	1.27 +/- 0.05	1.27 +/- 0.05
annealing residue (glass fibre content)	EN ISO 1172	%	25 +/- 2.5	25 +/- 2.5	25 +/- 2.5
shore hardness D	EN ISO 868	-	80 +/- 4 <sup>(4)</sup>	77 +/- 4 <sup>(4)</sup>	80 +/- 4
impact strength	EN ISO 179-1	kJ/m <sup>2</sup>	min. 25 <sup>(5)</sup>	min. 25 <sup>(5)</sup>	min. 45 <sup>(6)</sup>
tensile strength	EN ISO 527-2 and -4	N/mm <sup>2</sup>	min. 75 <sup>(7)</sup>	min. 50 <sup>(7)</sup>	min. 100 <sup>(8)</sup>
Young's modulus	EN ISO 527-2 and -4	N/mm <sup>2</sup>	min. 3700 <sup>(7)</sup>	min. 2600 <sup>(7)</sup>	min. 5800 <sup>(8)</sup>
elongation at break	EN ISO 527-2 and -4	%	min. 1.5 <sup>(7)</sup>	min. 1.5 <sup>(7)</sup>	min. 1.5 <sup>(8)</sup>

- <sup>1)</sup> Sample water content less than 0.2 % by weight
- <sup>2)</sup> Fast conditioning acc. to EN ISO 1110 (23 °C / 50 %)
- <sup>3)</sup> Maximum temperature 280 °C
- <sup>4)</sup> Specimen thickness 2 mm, unstacked
- <sup>5)</sup> Specimen 2fU (50 mm x 10 mm x 2 mm)
- <sup>6)</sup> Specimen 1fU (80 mm x 10 mm x 4 mm)
- <sup>7)</sup> Specimen Type 1BA
- <sup>8)</sup> Specimen Type 1A

This characteristic values were prepared from a small amount of test results.

Therefore some values include high safety factors. Tested values were much higher than published herein.

Insulating strips made of this material successfully passed the test according to EN 14024 at IFT-Rosenheim.

**In case of specific questions we gladly offer you our individual support.**

**Insulation solutions for windows, doors, and facades**