

## **Technical Data Sheet**

# Glastherm® HT 200 (SMC)

**GFK-UP** 

#### **Typical characteristics**

 Fibre-reinforced composite material developed for applications in field of thermal insulation (max. continuous operating temperature 200°C)

#### **Typical industries**

- Chemical Processing Industry
- Mechanical Engineering Industry
- Pipelines
- Oil and Gas

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g/cm <sup>3</sup>	1,8
Flexural strength $\perp$	ISO 178	MPa	200
Modulus of elasticity in flexion <sup>⊥</sup>	ISO 178	MPa	12000
Compressive strength 1) 1	ISO 604	MPa	320
Compressive strength 1) 1 +200°C	ISO 604	MPa	160
Tensile strength II	ISO 527	MPa	120
Impact strength <sup>1</sup> (Charpy)	ISO 179	kJ / m <sup>2</sup>	60
Splitting force II	DIN 53463	N	2200
Thermal properties			
Thermal conductivity <sup>2) ⊥</sup>		W / (m * K)	≈ 0,3
Coefficient of linear expansion II	TMA (Mettler)	10 <sup>-6</sup> x K <sup>-1</sup>	≈ 20
Max. continuous operating temperature		°C	200
Physical properties			
Water absorption (method 1)	ISO 62	%	< 0,1

<sup>=</sup> perpendicular to the lamination  $\mbox{II}$  = parallel to the lamination

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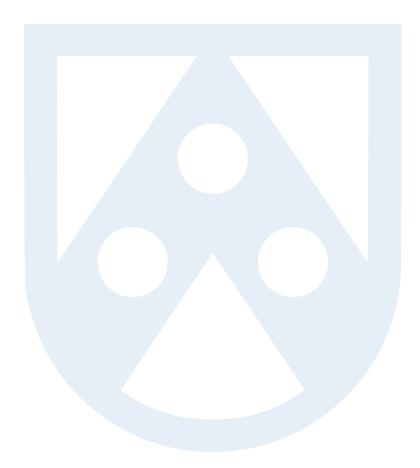
 $<sup>^{1)}</sup>$  Sample size: 20 x 20 x 20 mm

 $<sup>^{2)}</sup>$  Thermal conductivity calculated by means of reference measurements on samples of 300 x 200 x 10 mm

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