

OVERVIEW TECHNICAL DATA

FRATHERNIT® HP

Product description	Engineered composite material made of glass fiber cut, fillers and phenolic resin
Standard colour	brown
Main applications	Pressure resistant insulation material for tool- and mould makers
Delivery program	Sheets, panels and highly precise machined parts and finished components

Physical properties

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm ³	2,0
Water absorption	ISO 62	%	0,8

Thermal properties

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	-	°C	200
Operation temperature, short-term	-	°C	230
Coeff. of linear thermal expansion	DIN 51045	10 ⁻⁶ x K ⁻¹	13
Thermal conductivity	DIN 52612	W/mK	0,3

Mechanical properties

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm ²	330
Compressive strength at 200 °C	ISO 604	N/mm ²	140
Flexural strength at 23 °C	ISO 178	N/mm ²	100

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The standard values shown in this data sheet are measured by standard test methods. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.