

## OVERVIEW TECHNICAL DATA

# FRATHERNIT® HP

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

## Physical properties

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm <sup>3</sup>	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 <sup>-6</sup> x K <sup>-1</sup>	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 <sup>2</sup>	330
Compressive strength at 200 °C	ISO 604	N/mm <sup>2</sup>	140
Flexural strength at 23 °C	ISO 178	N/mm <sup>2</sup>	100

Issue 04/2016

We reserve the right to make changes in the context of further technical developments. The guide values listed in this data sheet are not contractual data.

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