

OVERVIEW TECHNICAL DATA

FRATHERNIT® Si

Product description	Engineered composite material made of resin-bound glass fabric
Standard colour	white
Main applications	Pressure resistant insulation material for tool- and mouldindustry
Delivery program	Sheets, panels and highly precise machined parts and finished components

Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm ³	1,85
Water absorption	ISO 62	%	0,1

Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	-	°C	280
Operation temperature, short-term	-	°C	350
Coeff. of linear thermal expansion	DIN 51045	10 ⁻⁶ x K ⁻¹	10
Thermal conductivity	DIN 52612	W/mK	0,21

Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm ²	500
Compressive strength at 250 °C	ISO 604	N/mm ²	350
Flexural strength at 23 °C	ISO 178	N/mm ²	250
Modul of elasticity at 23 °C	ISO 178	N/mm ²	22000

Issue: 11/2014

The standard values shown in this data sheet are measured by standard test methodes. 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.