

MACHINABLE MICAVER[®] HT

NEW PRODUCT

MICAVER[®] HT is a recently developed high temperature MICAVER[®] grade. It is a Machinable Glass Ceramic (MGC). MICAVER[®] HT is available in discs or boards ready to machine, it can also be moulded to the customer's requirement.



Machining

MICAVER[®] HT machinable glass ceramic can be machined with carbide tools or diamond tools. Diamond tools are recommended for better surface finish. The standard blanks available are 150mm diameter disks and a thickness from 13mm up to 30mm.

The finished machined components can have a tolerance up to 0.02mm.

The use of coolants similar to those formulated for glass or ceramics brings higher efficiency.

No post firing after machining is required.

Sealing

A compatible sealing glass can be used to produce a vacuum-tight hermetic seal.

Process vs Quantities

MICAVER[®] HT is the only machinable glass ceramic on the market capable of meeting cost requirement according to the quantities to be produced. For small series and prototype, Machinable MICAVER[®] HT is the obvious choice. When larger series are required MICAVER[®] HT can be moulded using compression or transfert moulding.

A further benefit is to co-mould metallic inserts, thanks to the compatible CTE of MICAVER[®] HT vs metals.

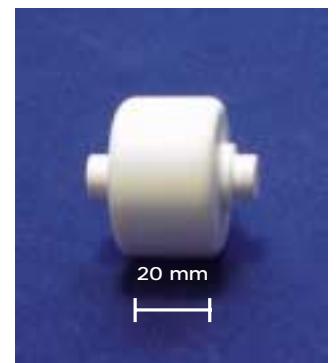
- Well adapted from prototype to large series

- White colour

- Up to 700°C
(1292°F)
continuously

- Blanks for machining / moulded parts

- Built-in inserts possible

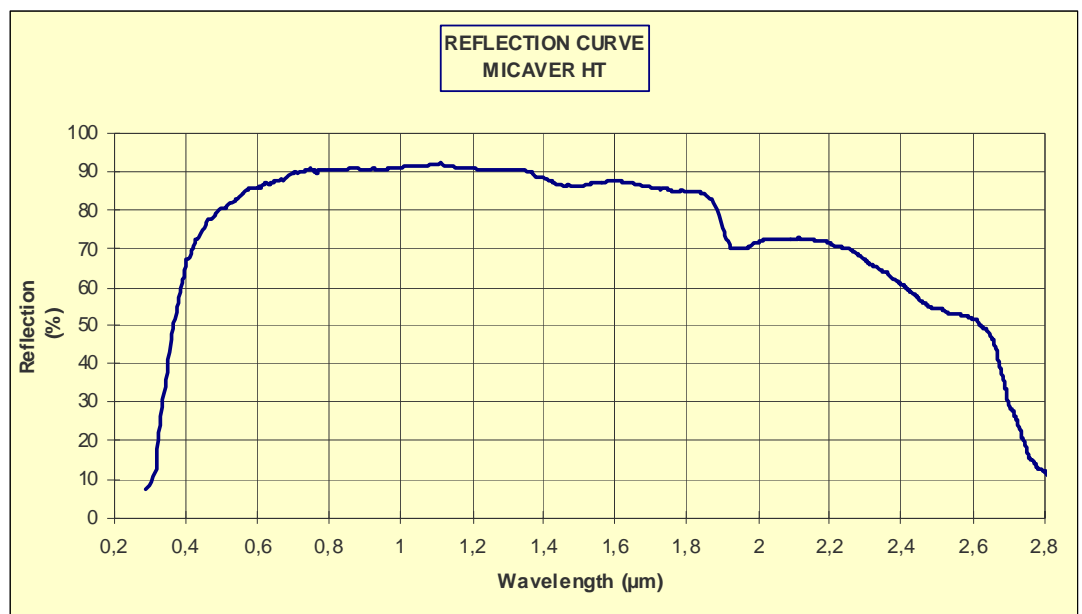


Properties (Typical values)

Property	Test Method	Units	Micaver® HT
Density		g/cm ³	2,8
Tensile strength	NFP 94-422	MPa	53
Flexural Strength	Pr EN 658-3	MPa	80
Compressive strength	ISO 10059-1	MPa	248
Continuous Operating Temperature		°C (°F)	700 (1292)
Maximum Peak Temperature		°C (°F)	750 (1382)
Thermal Expansion Coefficient		10 ⁻⁶ /K	16
Thermal Conductivity 170°C (338°F) 350°C (662°F) 630°C (1166°F)	SFC P 212	W/m/K W/m/K W/m/K	1,0 1,0 0,8
Dielectric Strength		kV/mm	4,2
Surface Resistivity	IEC 93	Ω	1,4.10 ⁹
Volume Resistivity	IEC 93	Ω.cm	3,7.10 ¹⁴
Relative Permittivity 23°C (73.4°F) 1kHz	IEC 250		8,4
Loss Tangent 23°C (73.4°F) 1kHz	IEC 250		0,02

Application examples

- Halogen lamp socket
- Infra-Red reflective parts
- Contact material in glass industry
- Vacuum application
- High temperature electrical devices, ...
- Nuclear industry
- Prototypes for ceramics parts



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The information given in this data sheet is believed to be accurate and reliable.

However it is the users responsibility to determine whether the material is suitable for his particular application, process and/or environment. This data sheet may be modified without prior notice.

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