

Crystar® 2000, Recrystallized Silicon Carbide (99% SiC), can be used as thermocouple protection tubes, closed on one end. A wide range of diameters are available. A flange, also made of the same material, can be attached on the open end upon request.

PROPERTIES

- High service temperature up to 1600 °C
- High thermal shock resistance

TYPICAL APPLICATIONS

- Furnaces
- Kilns

Standard dimensions and tolerances of Crystar® Tubes*

OD mm	Wall thickness mm	Max. length mm
< 20	4	1000
21 - 30	5	2500
31 - 40	5	2800
41 - 50	5	3000
51 - 60	6	3000
61 - 70	6	3000
71 - 80	6	3000
81 - 90	6	3000
91 - 100	6	3000

* Technical data, right of modification reserved

Tolerances:

- OD: + 1 / - 0.5 mm
- Wall thickness: + 3 / - 0.5 mm
- Length: ± 2 mm

Standard bending MD of Crystar® 2000 Tubes:

Length	MD
≤ 2000 mm	≤ 5 mm
2001 - 3000 mm	≤ 7 mm

Crystar® Thermocouple Protection Tubes

MATERIAL PROPERTIES: Crystar®

Properties			Unit	Value
SiC-Content			%	> 99
Maximum Application Temperature ¹⁾			°C	1600
Bulk Density	EN 993-1		kg/dm ³	2.7
Apparent Porosity	EN 993-1		Vol. %	15
Young's Modulus	EN 843-2	RT ²⁾	GPa	240
Modulus of Rupture	EN 993-6	RT ²⁾	MPa	80
	EN 993-7	1400 °C	MPa	90
Coefficient of Thermal Expansion	EN 993-10	α RT...1100°C	10 ⁻⁶ /K	4.8
Thermal Conductivity	EN 993-15	1000 °C	W/(m*K)	25

Issued Sep-09

Signs and symbols:

¹⁾ Dependent on the corresponding operating conditions

²⁾ Ambient temperature

Saint-Gobain Ceramic Materials

One New Bond Street P.O. Box 15136, 96472 Worcester, MA 01615-0136 • USA
Phone: +1 (508) 795-5264 • ceramicsrefractories@saint-gobain.com

www.ceramicsrefractories.saint-gobain.com

The information contained in this document is believed to be accurate and reliable but is provided without guarantee or warranty on the part of Saint-Gobain Ceramic Materials. Process parameters and requirements can impact typical values and test methods. Further, nothing present herein should be interpreted as an authorization or inducement to practice any patented invention without an appropriate license. Saint-Gobain Ceramic Materials Terms and Conditions apply to all purchases. ISO9001 Certified

PERFORMANCE CERAMICS & REFRACTORIES

