

# Enhanced Hexoloy® SA Silicon Carbide



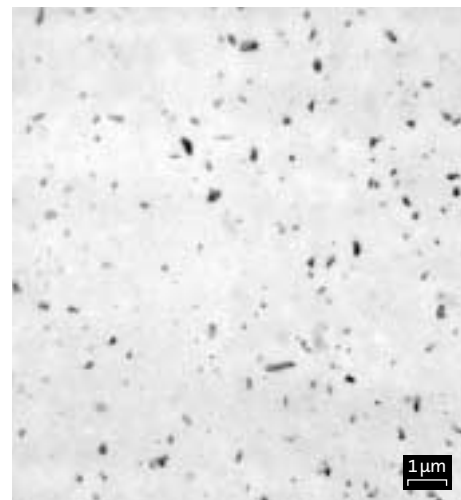
## Saint-Gobain Ceramics Structural Ceramics

Enhanced Hexoloy® SA exhibits reduced micro-porosity, which results in increased flexural strength and a higher Weibull modulus. It is well suited for use in critical applications as follows:

- High Stress Loads
- High Rotational Speeds
- Improved Wear Properties
- Low Surface Porosity

Physical Properties	Units	Standard Hexoloy® SA	Enhanced Hexoloy® SA
Flexural Strength 4 pt @ RT*	MPa x 10 <sup>6</sup> lb/in <sup>2</sup>	380 55	428 62
Compressive Strength @ RT	MPa x 10 <sup>6</sup> lb/in <sup>2</sup>	3900 560	3900 560
Weibull Modulus (2 parameters)	—	8	12
Fracture Toughness @ RT Double Torsion & SENB	MPa x m <sup>1/2</sup> x10 <sup>3</sup> lb/in <sup>2</sup> /in <sup>1/2</sup>	4.60 4.20	4.60 4.20

\* Test Bar Size: 3 x 4 x 45 mm (0.118" x 0.157" x 1.772")



Photomicrograph of Enhanced Hexoloy® SA Silicon Carbide (500X)

**Saint-Gobain Ceramics**  
Structural Ceramics  
Hexoloy® Products  
23 Acheson Drive  
Niagara Falls, New York 14303  
Telephone: 716-278-6233  
Fax: 716-278-2373  
E-mail: [scd.sales@saint-gobain.com](mailto:scd.sales@saint-gobain.com)  
[www.carbo.com](http://www.carbo.com)

©2004 Saint-Gobain Ceramics  
All Rights Reserved  
Form No. B-1003-2  
11/04

The information recommendations, and opinions set forth herein are offered solely for your consideration, inquiry and verification and are not, in part or total, to be construed as constituting a warranty or representation for which we assume legal responsibility. Nothing contained herein is to be interpreted as authorization to practice a patented invention without a license. Hexoloy® is a trademark of Saint-Gobain Ceramics.