

# Si Silicon Carbide

High Purity Metal

## Characteristics

- ✓ High strength
- ✓ High thermal expansion
- ✓ High hardness
- ✓ Excellent thermal shock resistance
- ✓ High elastic modulus
- ✓ Self-lubricating
- ✓ Good wearability

## Quick Facts

Molecular Formula	:	SiC
Molecular Weight	:	40.10 g/mol
Density	:	3.21g/cm <sup>3</sup>
Melting Point	:	2730 °C
Boiling Point	:	907 °C
Thermal Conductivity	:	144.0W/(mK)
Compressive Strength	:	2200MPa
Max Working Temp	:	Up to + 1000 °C
Young's Modulus	:	405GPa
Elastic modulus	:	380GPa

**Purity : 99.9%**

**Silicon carbide (SiC)** is a lightweight ceramic material with high strength properties comparable to diamond. It has excellent thermal conductivity, low thermal expansion and good wear resistance. Silicon carbide is an excellent ceramic material for applications requiring high temperature, good erosion and abrasive resistance. Consequently, it is useful in a variety of applications including spray nozzles, shot blast nozzles and cyclone components. The material can also be made an electrical conductor and has applications in resistance heating, flame igniters and electronic components. Structural and wear applications are constantly developing.

## Benefits

- ✓ Sealing rings and bearings
- ✓ Used in semiconductor and coating industries
- ✓ Automotive, aviation and aerospace
- ✓ Special bearings and pumps
- ✓ Electric switches and sensors, medical instruments
- ✓ Ball valve parts
- ✓ Hot gas flow liners
- ✓ Heat exchange

## High Purity Silicon Carbide

Available in:

**Pieces | Rods | Shots | Chips | Pellets | Wires | Ingots | Bars | Granules**



202ICE4588C



19ZAZG01274G



202ICE4588M

ISO 9001:2015  
CERTIFIED COMPANY



# SiC

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