

BORON CARBIDE

1 DESCRIPTION

One of the hardest synthetic materials with hardness reaching 9.4 on the Mohs scale and 2,800 on the Knoop scale. Boron Carbide is exceeded in hardness only by diamond (natural and synthetic) and Cubic Boron Nitride (CBN).

2 APPLICATIONS

Lapping hard materials, including metals and ceramics; ceramic components; nuclear technology; combustion retardant; metallurgical alloy; etc.

Shaped pieces, such as thermoelectric insulators, may be manufactured using pressing, extrusion, injection, molding and isostatic pressure.

3 TYPICAL CHEMISTRY

Total Boron	76.50%
Total Carbon	22.50%
Total Boron & Carbon	98.00%
Iron	0.20%

4 PHYSICAL PROPERTIES

Crystalline Structure	Rhombohedral
Knoop Hardness	2,800
Oxidation Temperature	932 F (500 C)
Melting Point	4,262 F (2,350 C)
Density	2.52 gr/cm ³

5 SPECIFICATIONS / NORMS

FEPA 42-1:2006
FEPA 42-2:2006

Micro Spec 's for 1000/F



6 SIZES

F-120	F-500
F-150	F-600
F-180	F-800
F-220	F-1000
F-240	F-1200
F-280	1000/F
F-320	
F-360	
F-400	

7 PACKAGING

22.7 kg and 25 kg plastic pails.