

Boron Carbide

1.Applications:

Abrasive field :

Surfaces of watches and jewels.

Refractory materials :

As an antioxidant additives in refractory field.

Ceramics materials :

As materials made of boron carbide products and wear resistant components using in Blasting , Sealing , Machinery , Ships , Auto , Dies , Aviation and Aerospace industries.

Armor tiles :

High density boron carbide armor tiles , bullet proofing seats of helicopters.

Nuclear industry :

Boron carbide is an important material for nuclear applications due to high absorption cross section.

Boriding Agent :

Boron carbide is a raw material used in boriding agent. After the treatment , The hardness and the wear resistance of the surface are greatly improved.

Chemical additives :

Because of boron carbide good chemical resistance , for producing other boron containing materials such as titanium boride or zirconium boride.

Solid fuel :

Boron carbide based propellants for ducted rockets.

Data sheet

Grain Size	Basic Size μ m	B%	C%	B ₄ C%
F60	250	77-80	17-21	96-98
F70	212			
F80	180			
F90	150			
F100	125			
F120	106			
F150	75	76-79		95-97
F180	75-63			
F220	63-53			
F230	$D_{50}=53 \pm 3.0$			
F240	$D_{50}=44.5 \pm 2.0$	75-79		95-96
F280	$D_{50}=36.5 \pm 1.5$			
F320	$D_{50}=29.2 \pm 1.5$			
F360	$D_{50}=22.8 \pm 1.5$			
F400	$D_{50}=17.3 \pm 1.0$	74-78		94-95
F500	$D_{50}=12.8 \pm 1.0$			
F600	$D_{50}=9.3 \pm 1.0$	74-78		91-94
F800	$D_{50}=6.5 \pm 1.0$			
F1000	$D_{50}=4.5 \pm 0.8$	76-81		93-97
F1200	$D_{50}=3.0 \pm 0.5$			
F1500	<5	76-81	93-97	
60#-150#	250-75			
-100 mesh	<150			
-200 mesh	<75			
-325mesh (0-44 μ m)	<45			
-25 μ m	<25			
-10 μ m	<10			