



BB – Boron Carbide

MATERIAL TECHNICAL DATA SHEET

TRADE NAME:

BB

MATERIAL DESCRIPTION**Chemical Name & Formula:**Boron Carbide – B₄C**MAIN COMPONENTS**B₄C:

99% min

PHYSICAL DATA

Physical Form: Polycrystalline structure

Boiling Temperature: N.A.

Melt Temperature: 2450°C

Vapour Pressure: N.A.

Evaporation Rate: N.A.

Specific gravity: N.A.

Density: >2,48g/cm³

Water solubility: Insoluble

Colour: Dark Grey

Odour: None

MECHANICAL PROPERTIES AT ROOM TEMPERATURE

Water Absorption	%	0
Vickers Hardness	(HV 0,5)	2600
Flexural Strength	MPa	360
Compressive Strength	MPa	300
Young's Modulus	GPa	250
Maximum service temperature	°C	1700
Thermal Expansion Coefficient (RT-500°C)	10 ⁻⁶ /°C	4,92
Thermal Shock Resistance (ΔT)	°C	110

PHYSICAL AND CHEMICAL PROPERTIES

Thermal and wear resistance.

Please, note that all values quoted are based on test pieces and may vary according to component design. These values are not guaranteed in any way and should only be treated as indicative values. They should be used for guidance only and for no other purpose.

BETTINI s.r.l.

Via Industriale, 11 I - 23804 - Monte Mariano (LC) - ITALY

Tel. +39 0341 63.15.88 - E-mail: box@bettini.srlwww.bettini.srl

It is strictly forbidden to publish, edit, market, distribute, radio or video transmitted in any way or in any form, reproduce, communicate to public, make available to public, rent and loan, perform publicly, use in any way and disseminate -from anyone- trademarks, graphics settings, text, photos, graphics, audio and video works by third parties and everything else included in this document, unless written permission to ask exclusively at box@bettini.srl