

With state of the art facilities and strategic alliances with global partners, CUMI has achieved a reputation for quality and innovation by constantly listening to its customer needs and developing products that exceed their expectations. CUMICARB\_R<sup>®</sup> is our range of solutions for excellent wear & corrosion resistance and ballistic applications.

## Properties

Properties	Units	Test (ASTM)	Value
<b>M E C H A N I C A L</b>			
Elastic modulus	Gpa	C1198-08	200
Poisson's ratio		C1198-08	0.21
Flexural strength	MPa	C1161-02c (2008)	400
Compressive strength	MPa	C1424-04	2500
Fracture toughness	Mpa.m <sup>0.5</sup>	C1421-01b (2007)	(3-4)
Vickers Hardness	R45N (Gpa,1000g)	C1327-03	85(22)
<b>T H E R M A L</b>			
Thermal Conductivity	W/m-k	C1470-06	2.2
Coefficient of thermal expansion @ 25-1000°C	10 <sup>-6</sup> /°C	C1470-06	4.0
Specific heat	J/Kg-k	C1470-06	400
Max. use temperature	°C	No load condition	1250
Thermal shock, Tc	°C	C1525-04	400
<b>E L E C T R I C A L</b>			
Dielectric strength	Ac-kv/mm (3.18mm)	D149- 97a (2004)	9.0
Dielectric loss	25°C @ 1MHZ	D2520-01	0.001
Volume resistivity	25°C, ohm-cm	D2520-01	>10 <sup>13</sup>
	25°C, ohm-cm	D1829	2*10 <sup>4</sup>
	1000°C, ohm-cm		<10 <sup>3</sup>

Reaction bonded Silicon Carbide (RbSiC)  
(89% SiC + 11% free Si)

Colour = Black

Water Absorption = 0%

Density = 3.05 gm/cc

“Excellent Wear, Corrosion Resistant & Ballistic Properties”

## Advantages

## Applications

Apexes

Aggregate

## Industries Served



Making  
Materials  
Matter

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