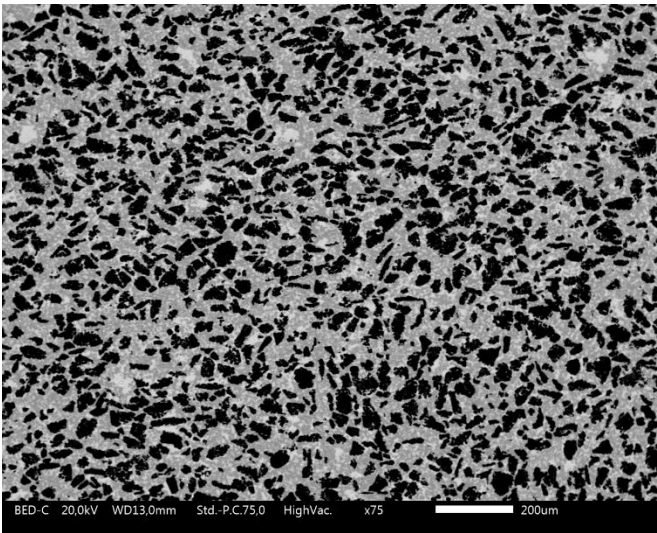


Petro-B₄CSiC

**The Advanced Ceramic for Defence application
satisfying body and vehicle protection requirements**



Petro-B₄CSiC is a lightweight liquid silicon infiltrated reaction bonded ceramic developed to overcome the benchmark products by an innovative production process and thanks to its homogeneous texture. Both planar and complex shapes can be manufactured, depending on the specific needs. The standard product has been successfully tested on the bases of NIJ 0101.06 up to level IV and STANAG 4569 KE level IV requirements.

	Standard	Unit	Average Value	
			Torso plates	Hexagons
Density	ASTM C-20	g/cc	2.68 - 2.70	2.73 - 2.75
Open porosity		%	<0.5	<0.5
Bending strength	ASTM 1161-02	MPa	160 - 190	
Bending modulus		GPa	200 - 250	
Boron Carbide (B ₄ C)	I.P.*	Wt % (±2% tolerance)	47	44
Silicon Carbide (SiC)			36	42
Silicon (Si)			17	14

* I.P. = Internal procedure