



## Advanced Material & Metal Compounds

### ■ Chromium carbide (Cr<sub>3</sub>C<sub>2</sub>)

**Chromium carbide**, gray powder with rhombic system structure, is indissoluble in water and resistant to acid and alkali. Being high melting point, wear resistance, anti-corrosion and resistance to oxidation, it is expansively used as thermal spray material to protect the metal surface, or as an additive to fine the cemented carbide crystalline grain, plasma spray, and in the metallurgy, electric power, petrochemical field.



No.	Item	Standard Specification								
		Content %		Impurities % ≤ each						
1	Cr <sub>3</sub> C <sub>2</sub>	Free C	Total C	O	N	Fe	Nb	Si	S	K/Ca
2	Chemical	≤0.30	≥12.8	0.70	0.10	0.08	0.01	0.04	0.03	0.005
3	Size	0.5-500micron, 5-400mesh								
4	Packing	2kgs in composite bag with iron drum outside, 25kgs net								

### ■ Zirconium Carbide (ZrC)

**Zirconium carbide**, gray metallic powder with cubic lattice system structure, melting point 3540°C, boiling point 5100°C, density 6.73g/cm<sup>3</sup>, is of chemical stability and excellent high temperature property. The fine ZrC powder is an important cermet material to make cutting tool, incandescent flame, and pyro-conductor etc. its cermet powder is the key material for hard alloy, aerospace material, atomic energy, electronic devices etc.



No.	Item	Standard Specification					
		Content %		Impurities % ≤ each			
1	ZrC	Free C	Total C	O	N	Fe/Ca	K/Si/Na/Nb
2	Chemical	≤0.50	≥11.2	0.50	0.05	0.05	0.005
3	Size	0.5-500micron, 5-400mesh					
4	Packing	2kgs in composite bag with iron drum outside, 25kgs net					

### ■ Hafnium Carbide (HfC)

**Hafnium carbide**, grey-black powder, melting point3890°C, density 12.7g/cm<sup>3</sup>, is of chemical stability and excellent high temperature property. With high hardness, oxidation resistance, thermal conductivity and toughness, it is important structural material of high melting point, high strength and anti-corrosive, which is mainly used in hard alloy, aerospace, atomic energy and electronic industry etc.



No.	Item	Standard Specification						
		Content %		Impurities % ≤ each				
1	HfC	Free C	Total C	O	N	Fe	Ca	K/Na/Si/Nb
2	Chemical	≤0.30	≥6.15	0.50	0.05	0.05	0.05	0.005
3	Size	0.5-500micron, 5-400mesh						
4	Packing	2kgs in composite bag with iron drum outside, 25kgs net						