



Tantalum Carbide Powder

❖ Product Introduction

Tantalum Carbide (TaC) powder is an ultra-high temperature refractory ceramic powder widely applied in cemented carbides, wear-resistant coatings, aerospace ultrahigh-temperature components and advanced cermets due to its ultrahigh melting point, exceptional hardness and outstanding high-temperature mechanical stability.

❖ Product Characteristics

- 1.High purity, spherical morphology available, controllable particle size with narrow particle size distribution
- 2.Ultrahigh melting point, outstanding thermal stability and excellent chemical inertness
- 3.Extraordinary hardness, superior wear resistance and good electrical conductivity
- 4.Insoluble in water and common acids, resistant to oxidation and corrosion at moderate temperatures

❖ Product Specifications

Product ID	Formula	Purity	Size
730600PD001	TaC	99%	Fsss: $\leq 1.5\ \mu\text{m}$
730600PD002	TaC	99.5%	Fsss: $\leq 1.5\ \mu\text{m}$
730600PDC01	TaC	Customized	Customized

Chemical compositions (wt%)										
Product ID	Purity	T. C	F. C	Nb	Ti	Fe	Si	Al	Na	Ca
730600PD001	$\geq 99\%$	≥ 6.2	≤ 0.15	1.0	0.02	0.10	0.02	0.01	0.02	0.02
730600PD002	$\geq 99.5\%$	≥ 6.2	≤ 0.1	0.30	0.01	0.06	0.01	0.01	0.015	0.01

❖ Typical Applications

Tantalum Carbide (TaC) powder delivers extraordinary high-temperature resistance and superior hardness, ideal for cemented carbide additives, ultra-high-temperature protective coatings, cutting tools, and aerospace refractory components.

❖ Packaging

Outer packaging: carton or fiber drum.

Inner packaging: double vacuum-sealed bags.

Packing specification: 1 kg/bag or 25 kg/drum.

Customized packaging is available upon request.

❖ Storage

During transportation and storage, avoid moisture, contamination and direct sunlight. Keep away from fire sources and corrosive substances. Use the bag as soon as it is opened. The shelf life is no more than 24 months from the production date.

❖ Custom specifications are available, including

- Higher purity
- Narrower Particle Size Distribution
- Special Mesh Size Screenings
- Special proportions

❖ Cautions

This product is harmful if swallowed or inhaled, and may cause skin and eye irritation. Inhalation may irritate the respiratory tract; avoid inhalation. We recommend that customers inform us of their intended use before purchasing to ensure proper product use.

Disclaimer

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