

## Certificate of Analysis (CoA)

May 11, 2026

**Product Name:** Tantalum Carbide Powder**Chemical Formula:** TaC**Purity:** 99.9%**Particle Size:** FSSS 1–3  $\mu\text{m}$ **Quantity:** 500 g**Lot Number:** CSSTL-260510B137 (2602311-1)**Manufactured by:** MetalsTek Engineering

---

### Physical Description

Appearance: Dark gray to black powder

Crystal Structure: Cubic

Theoretical Density: 14.5 g/cm<sup>3</sup>Melting Point: ~3880 °C

---

### Chemical Composition

Component	Symbol	Typical Value
Tantalum	Ta	93–94 wt%
Total Carbon	C	6.1 wt%
Free Carbon	C(free)	<0.07 wt%
Oxygen	O	<0.43 wt%
Niobium	Nb	<0.20 wt%
Iron	Fe	<0.05 wt%
Silicon	Si	<0.03 wt%
Aluminum	Al	<0.02 wt%
Other metallic impurities	–	<0.20 wt%
TaC Phase Purity	–	>99.9%

---

## Certificate of Analysis (CoA)

May 11, 2026

### Particle Size Distribution

#### Parameter Value

FSSS 1.0  $\mu\text{m}$

Morphology Irregular / Non-spherical

---

### Handling & Storage

Store in a dry and sealed container.

Avoid exposure to moisture and oxidizing atmosphere.

Handle with appropriate protective equipment to avoid inhalation of fine powder.

---

### Declaration

The material described above has been manufactured, inspected, and released in accordance with internal quality control procedures and complies with the specifications stated herein.

### Authorized Signature:

Inspection Certificate by: Nancy Liu

Approver by: Chen Qiang

