

Catalog # 73-1000 Tantalum(V) chloride, anhydrous (99.9%-Ta)



Thermal Behavior:

- Melting point: 216-220°C
- Sublimation: 144°C
- Boiling point: 232-235°C

Technical Notes:

1. ALD/CVD precursor thin tantalum containing film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Ta	PE-ALD	100°C	-	PLH_2	250°C	1
Ta ₂ O ₅	ALD ALD, CVD	100°C	7.5 Torr	H ₂ O Ta(OEt) ₅ , H ₂ O	300°C	2
		90°C	7.5 Torr		275-450°C	3
TaN _x	ALD	90°C	7.5 Torr	NH ₃	200-500°C	4
	ALD	110°C	-	NH ₃	600°C	5
	PE-ALD	90°C	-	PLN_2	200-400°C	6
	PE-ALD	110°C	-	PLH_2 , PLN_2	300°C	7
TaNO _x	ALD	90°C	7.5 Torr	NH ₃ , H ₂ O	200-500°C	4
TaSiO _x	ALD	-	-	SiCl ₄ , H ₂ O	250°C	8

References:

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