

Catalog # 42-1390 Molybdenum(V) chloride, anhydrous, 99.6%

MoCl₅

Thermal Behavior:

- Melting point: 194°C
- Boiling point: 268°C
- Vapor pressure: 1.75 Torr/25°C; 131 Torr/250°C

Technical Notes:

1. ALD/CVD precursor for molybdenum containing thin film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
MoN _x	ALD	90°C	7.5 Torr	Me ₂ NNH ₂	400°C	1
	ALD	90°C	7.5 Torr	NH ₃	350-500°C	2
	ALD	-	1 Torr	NH ₃	450°C	3
MoS ₂	ALD	120°C	-	H ₂ S	300°C	4
	ALD	105°C	0.75 Torr	H ₂ S	350-450°C	5
	ALD	70°C	-	H ₂ S	475°C	6
	ALD	115°C	3.75 Torr	S(Me ₃ Si) ₂	300°C	7-8
MoSe ₂	ALD	120°C	-	Se(Me ₃ Si) ₂	300°C	9
	ALD	120°C	-	Cycl. (Me ₂ Si) _n Se	300°C	10
	ALD	120°C	1.5 Torr	(R ₃ Si) ₂ Se, (R ₃ Sn) ₂ Se	300°C	11
MoTe ₂	ALD	120°C	1.5 Torr	Cycl. Me ₈ Si ₄ Te ₂	270°C	12

References:

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