

Material Data Sheet: Molybdenum Oxide

Molybdenum Oxide (MoOx)

Version 1.2, Last Updated: 11/21/2025

1. Identification and Purity

Trade Name / Abbreviation	MoOx
Chemical Formula	Mo ₄ O ₁₁ or less Oxygen
SCI Part Number	X042001XXXXZ25
Purity	99.50%

2. Physical and Mechanical Properties

Property	Value	Measurement / Units
Density (Bulk)	4.69	g/cm ³
Density (Sintered)	4.29	g/cm ³
Melting / Sublimation	850	°C / °F
Hardness	3-5	Mohs Scale
Mechanical Stress / Modulus	—	MPa / GPa
Band Gap / Electrical Type	0 (semimetal)	eV / Semimetal
Configuration	Planar	Target Type
Backing Plate Compatibility	Copper & Molybdenum	Compatibility Notes
General Comments	Semimetal properties suitable for charge injection layers.	—

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