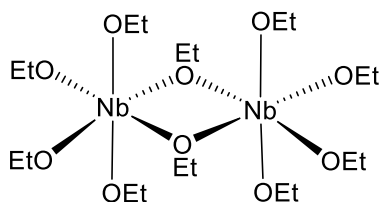


Catalog # 93-4104 Niobium(V) ethoxide (99.9+%-Nb)



Thermal Behavior:

- Vapor pressure curve available in [7]
- TGA available in [7]

Technical Notes:

1. Liquid alkoxide precursor for the growth of Nb oxide based thin films by ALD and CVD.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Nb ₂ O ₅	ALD	95-140 °C	7.5 Torr	D ₂ O	325 °C	[3]
Nb ₂ O ₅	CVD	115 °C		air	300-450 °C	[1]
Nb ₂ O ₅	PAALD	130 °C	7.5 Torr	-	180-245 °C	[12]
Nb _{1-x} Ta _x O ₅	ALD	90-95 °C	7.5 Torr	H ₂ O, Ta(OEt) ₅	300-325 °C	[2, 4]
Nb _{1-x} Ta _x O ₅	ALD	90 °C	7.5 Torr	H ₂ O, TaCl ₅	300-325 °C	[2]
NbAl _x O _y	ALD	95 °C	7.5 Torr	H ₂ O, AlCl ₃	300 °C	[4]
NbAl _x O _y	ALD		1.5 Torr	H ₂ O, Me ₃ Al	300 °C	[6]
NbTi _x O _y	ALD	90 °C	7.5 Torr	H ₂ O, Ti(OMe) ₄	215 °C	[5]
NbSi _x O _y	ALD	90-93 °C	7.5 Torr	O ₃ , Si ₂ (NH ₂) ₆	300 °C	[15]
LiNbO ₃	ALD	100 °C		H ₂ O, LiN(SiMe ₃) ₂	235 °C	[8]
LiNbO ₃	ALD	155 °C		H ₂ O, LiO ^t Bu	190 °C	[11]
NaNbO ₃	ALD	68 °C	2 Torr	H ₂ O, NaO ^t Bu	200-350 °C	[9]
KNbO ₃	ALD	68 °C	2 Torr	H ₂ O, KO ^t Bu	200-350 °C	[9]

RbNbO ₃	ALD	70 °C	2.1 Torr	H ₂ O, RbO ^t Bu	250 °C	[10]
K _x Na _{1-x} NbO ₃	ALD	68 °C	0.8 Torr	H ₂ O, NaO ^t Bu, KO ^t Bu	250 °C	[13]
KTa _x Nb _{1-x} O ₃	ALD	70 °C	2.1 Torr	H ₂ O, KO ^t Bu, Ta(OEt) ₅	250 °C	[14]

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