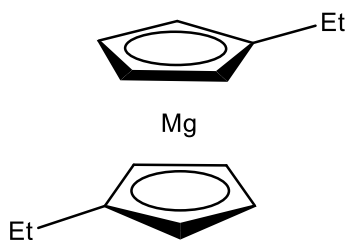


Catalog # 12-0510 Bis(ethylcyclopentadienyl)magnesium, min. 98%



Thermal Behavior:

- Vapor pressure 6×10^{-3} Torr at 10 °C [1]
- Melting point -17 to -18 °C [1]

Technical Notes:

1. Liquid precursor with high volatility for the growth of Mg containing films including the doping of III/V semiconductors.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
MgO	ALD	80-90 °C	1.8 Torr	H ₂ O	125-400 °C	[3]
MgO	ALD		0.5-1 Torr	H ₂ O	200 °C	[8]
MgO	ALD PEALD	60 °C		H ₂ O O ₂ plasma	220-400 °C	[13]
Mg _x Zn _{x-1} O	PECVD			Et ₂ Zn, O ₂ plasma	400-700 °C	[2]
Mg _x Zn _{x-1} O	ALD	60 °C		Et ₂ Zn, H ₂ O	120 °C	[4]
Al _x Mg _{1-x} O _y	PEALD			Me ₃ Al, O ₂ plasma	200 °C	[7]
Al ₂ O ₃ /MgO	ALD			Me ₃ Al, H ₂ O	70 °C	[14]
Be _x Mg _{1-x} O	ALD			Me ₂ Be, H ₂ O		[12]
Mg ₃ (PO ₄) ₂	PEALD		0.3 Torr	P(NMe ₂) ₃ , H ₂ O, O ₂ plasma	125-300 °C	[10]
Mg ₃ (PO ₄) ₂	PEALD			P(NMe ₂) ₃ , H ₂ O, O ₂ plasma	125-300 °C	[15]

MgF ₂	ALD	80 °C	0.22 Torr	HF	100-250 °C	[5]
MgF ₂	ALD	92 °C	1 Torr	HF pyridine sol.	150 °C	[6]
Mg:InGaAs	CVD	10 °C	80 Torr	Me ₃ In, Et ₃ Ga, AsH ₃	520-585 °C	[1]
Mg:InGaN	CVD		200 Torr	Me ₃ In, Et ₃ Ga, NH ₃ , H ₂	900 °C	[9]
Mg:Al _x Ga _{1-x} N	CVD	40 °C	760 Torr	Me ₃ Al, Me ₃ Ga, NH ₃		[11]

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