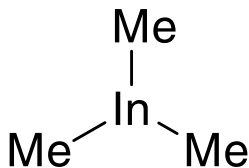


Catalog # 49-2010 Trimethylindium, 98+% (99.9+%-In)



Thermal Behavior:

- Melting point 88°C [1]
- Boiling point 134°C [1]
- Vapor Pressure: ~1.1 Torr/23°C; Diagrams and tables are available in [1-3]

WARNING - Trimethylindium may undergo rapid thermal decomposition if exposed to temperatures above 100°C. Never attempt to distill the material at atmospheric pressure.

Technical Notes:

1. ALD precursor for indium containing thin film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
In ₂ O ₃	ALD	RT	0.1 Torr	O ₃	100-200°C	4
	PEALD	RT	2.0 Torr	^{PL} O ₂	200°C	5
InN	PEALD	RT	0.17 Torr	^{PL} N ₂	160-260°C	6
	PEALD			^{PL} N ₂ , ^{PL} Ar/N ₂ ,	120-240°C	7
	PEALD	4.5 Torr	^{PL} Ar/N ₂ /H ₂ ^{PL} NH ₃	200-360°C	8	
InP	ALD	-	-	PH ₃	350-450°C	9
InAs	ALD	-	-	AsH ₃	360-420°C	10
InSn _x O _y	ALD	RT	0.1 Torr	Sn[NMe ₂] ₄ , O ₃	100-200°C	4
InTi _x O _y	PEALD	RT	2.0 Torr	Ti(O ⁱ Pr) ₄ , ^{PL} O ₂	200°C	5
InZn _x O _y	ALD	50°C, -		Et ₂ Zn	200°C	11-12

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