

Catalog # 93-4932 Indium(III) chloride, anhydrous (99.999%-In) PURATREM



## Thermal Behavior:

- Melting point: 586°C [1]
- Boiling point: 800°C
- Sublimation: -387°C/0.76 Torr [2]
- Vapor pressure studies available in [1, 3]

## Technical Notes:

1. ALD/CVD precursor and dopant for indium thin film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
In <sub>2</sub> O <sub>3</sub>	ALD	275°C	-	H <sub>2</sub> O <sub>2</sub>	500°C	4
	ALD	275°C	7.5 Torr	H <sub>2</sub> O	500°C	5
Zr:In <sub>2</sub> O <sub>3</sub>	ALD	275°C	7.5 Torr	ZrCl <sub>4</sub>	500°C	6
In <sub>2</sub> Se <sub>3</sub>	ALD	285°C	7.5 Torr	(R <sub>3</sub> Si) <sub>2</sub> Se	295°C	7
	ALD	110°C	-	H <sub>2</sub> Se	310-380°C	8
CuIn <sub>x</sub> S <sub>y</sub>	ALD	300-345°C	1.5 Torr	CuCl, H <sub>2</sub> S	350-500°C	9-10

## References:

1. [Helv. Phys. Acta, 1936, 9, 405.](#)
2. [J. Phase Equilibria Diffus. 2005, 26, 20.](#)
3. [Z. Anorg. Allg. Chem. 2013, 1840.](#)
4. [Electrochem. Solid-State Lett. 1998, 1, 156.](#)
5. [Thin Solid Films 2000, 368, 1.](#)
6. [Thin Solid Films, 2003, 440, 152.](#)
7. [J. Am. Chem. Soc. 2009, 131, 3478.](#)
8. [Electronics 2017, 6, 27.](#)
9. [Thin Solid Films, 2003, 431, 492.](#)
10. [Chem. Vap. Deposition, 2004, 10, 45.](#)