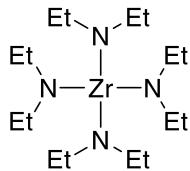


Catalog # 93-4040 Tetrakis(diethylamino)zirconium, 99%



Thermal Behavior:

- Decomposition at 140°C [1]
- Vapor pressure: 0.1 Torr/79°C; 1 Torr/108°C [1]
- TGA data and diagram are available in [2]

Technical Notes:

1. Precursor for thin zirconium film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
ZrO ₂	ALD	110°C	< 1 Torr	H ₂ O	50-350°C	1
	ALD	75°C	-	H ₂ O	70°C	3
	PE-ALD	90°C	1 Torr	P ₂ O ₅	250°C	4
	ALD	112°C	-	O ₂	300°C	5
ZrN _x	ALD PE-ALD	120°C 85°C	< 1 Torr 0.1-1 Torr	NH ₃ P ₂ N ₂	150-250°C 150-400°C	6 7
SiZr _x O _y	CVD	70°C	0.1 Torr	Si(O ⁿ Bu) ₄	400°C	8
LaZr _x O _y	ALD ALD	112°C -	- -	La(N(TMS) ₂) ₃ H ₂ O La-FMD, O ₂	250°C 300°C	9 10
HfZrO _x	ALD	-	-	Hf(NEt ₂) ₄ , H ₂ O	125°C-375°C	11

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