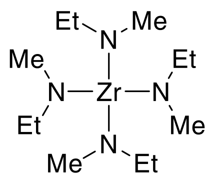
Catalog # 40-1710 Tetrakis(ethylmethylamino)zirconium(IV), 99% TEMAZ



Thermal Behavior:

- Decomposition: 130°C [1]
- Vapor Pressure: must be 0.1 Torr/76°C, 1 Torr/106°C [1]

Technical Notes:

1. ALD/CVD precursor for Zr thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
ZrO_2	ALD PEALD ALD PEALD	110°C 80°C - -	0.5 Torr - - 3-5 Torr	H_2O $^{PL}O_2$ O_3 $^{PL}N_2O$	50-300°C 110-250°C 250°C 280°C	1 2 3 4
$Hf_xZr_yO_z$	ALD PELAD ALD	- - -	- - -	$Hf[N(EtMe)]_4$, O_3 $Hf[N(EtMe)]_4$, $^{PL}O_2$ $Hf[N(EtMe)]_4$, H_2O, O_3	280°C 280°C 250°C	5 6 7
Zr_3N_4	ALD	95°C	0.20-0.35 Torr	NH_3	150-250°C	8
ZrF_4	ALD	112°C	1 Torr	HF	150°C	9
ZrO_xF_y	ALD	110°C	1 Torr	HF, H_2O	150°	10

References:

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