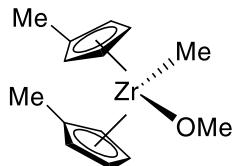


Catalog # 40-1028 Bis(methylcyclopentadienyl)(methyl)(methoxy)zirconium(IV), 98+%



Thermal Behavior:

- TGA diagram and data is available in [1, 2]

Technical Notes:

- ALD/CVD precursor for zirconium containing thin film deposition.

| Target Deposit | Deposition Technique | Delivery Temperature | Pressure | Co-reactants | Deposition Temperature | Ref. |
|---|----------------------|----------------------|---------------|---|------------------------|------|
| ZrO_2 | ALD | 160°C | 3.75 Torr | H_2O | 350-650°C | 1 |
| | CVD | Tol. Solution | | O_2 | 250-450°C | 1 |
| | ALD | 68°C | 1.5-2.25 Torr | H_2O | 300-500°C | 3 |
| | ALD | 68°C | 1.5-2.25 Torr | O_3 | 250-500°C | 4 |
| $\text{M}_2\text{O}_3:\text{ZrO}_2$ M=La, Hf, Er, Gd | ALD | 160°C | 3.75 Torr | $(\text{iPrCp})_3\text{La}, \text{H}_2\text{O}$ | 300°C | 5 |
| | ALD | 68°C | 1.5-2.25 Torr | $(\text{CpMe})_2\text{Hf}(\text{OMe})\text{Me}, \text{O}_3$ | 350°C | 6 |
| | ALD | - | - | $\text{Er}(\text{thd})_3, \text{Gd}(\text{thd})_3 \text{O}_3$ | 350°C | 7, 8 |

References:

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