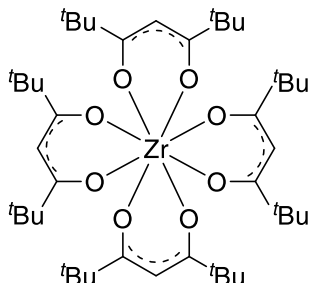


Catalog # 40-5000 Tetrakis(2,2,6,6-tetramethyl-3,5-heptanedionato)zirconium(IV), 99% [Zr(TMHD)4]  
 Syn: Zr(DPM)4, Zr(THD)4



#### Thermal Behavior:

- Sublimation: 192°C/AP [1]; 200°C/AP [2-4]
- Decomposition: >370°C [1]
- Melting point (controversial): 318°C [1], 334°C [5] 341°C [6]
- Vapor pressure: 0.1 Torr/180°C [7], calculations and data are available in [2-3, 6]
- TGA diagram and data is available in [1-6]

#### Technical Notes:

1. ALD/CVD precursor for Zr thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
ZrO <sub>2</sub>	ALD	170°C	1.5-2.25 Torr	O <sub>3</sub>	250-500°C	8
PbZrO <sub>3</sub>	ALD	130°C	2.25 Torr	Ph <sub>4</sub> Pb, O <sub>3</sub>	275-300°C	9
Pb(Zr,Ti)O <sub>x</sub>	ALD	200°C <sup>Solv</sup>	1 Torr	H <sub>2</sub> O, Pb(thd) <sub>2</sub> , Ti(thd) <sub>2</sub> Pr <sub>2</sub>	240°C	10
Fe: ZrO <sub>2</sub>	ALD	170°C	-	O <sub>3</sub>	350°C	11

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