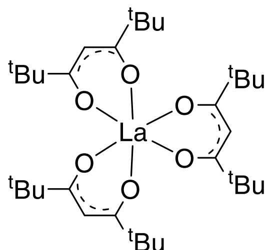
Catalog # 57-1000 Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)lanthanum(III), 99% (99.9%-La) (REO)
[La(TMHD)3]



Thermal Behavior:

- Melting point: 238-248°C (in a sealed tube) [1], 263°C [4], 224-230°C [5]
- Sublimation: 184 /0.75 Torr [2], ~200-210°C/AP [3-4]
- TGA diagrams and data are available in [3-4]

Technical Notes:

1. ALD/CVD precursor for La thin film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
L_2O_3	CVD ALD ALD	200°C 200°C 185°C	10 Torr 0.3 Torr 2.25 Torr	O_2 H_2O O_3	350-500°C 500-800°C 225°C	4 6 7
LaF_3	ALD	175°C	7.5 Torr	TiF_4	225-350°C	8
$LaAlO_3$	ALD	185°C	-	TMA, O_3	250°C	9
$La_{1-x}Ca_xMnO_3$	ALD	195°C	1.35 Torr	$Mn(thd)_3$, $Ca(thd)_3$, O_3	200-330°C	10
$LaLuO_3$	ALD	-	1.5-2.25 Torr	$Lu(thd)_3$, O_3	300°C	11
$LaPO_4$	ALD	185°C	2 Torr	Me_3PO_4, H_2O, O_3	200-400°C	12
$LaCuO_{3-x}$	ALD	-	2 Torr	$Cu(acac)_2$, O_3	250°C	13
$LaFeO_3$	ALD	210°C	-	$Fe(Cp)_2$, NO_2	250°C	14
$LaNiO_3$	ALD	185°C	1.8 Torr	$Ni(acac)_2$, O_3	225°C	15

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