Catalog # 03-0780 Lithium t-butoxide, 98+%

Li—O^{t}Bu

Thermal Behavior:

- Melting point: 150°C
- Sublimation temperature: 110°C/0.75 Torr [1]
- Vapor pressure 0.1 Torr/120°C [2]
- TGA analysis is available in [3]

Technical Notes:

1. ALD precursor for Li thin film deposition widely used in Li ion battery related applications

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Li_2O LiOH	ALD	160°C	0.2 Torr	H_2O, O_2^{Plasma}	225-300°C	4
Li_2S	ALD	140°C	0.2 Torr	H_2S	150-300°	5
LiF	ALD	135°C, 130°C	1 Torr, 3.4 Torr	HF, NH_4F	150-300°C	6-7
$LiAlF_4$	ALD	160-170°C	-	$AlCl_3$, TiF_4	250°C	8
$LiTa_xO_y$	ALD	170°C	-	$Ta(OEt)_5$, H_2O	225°C	9
$LiCoO_2$	ALD	150°C	0.02 Torr	$CoCp_2$, O_2^{Plasma}	325°C	10
$LiFePO_4$	ALD	180°C	-	$FeCp_2$, $P(OMe)_3O$, H_2O/O_3	300°C	11
LiPON	ALD	165°C	0.2 Torr	$P(OMe)_3O$, H_2O; N_2^{Plasma}	250°C	12
$Li_7La_3Zr_2O_{12}$	ALD	170°C	-	$La(^iPrFMD)_3$, $Zr(NMe_2)_4$, H_2O/O_3	225°C, 555°C	13
$LiMn_xO_y$	ALD	160°C	-	$Mn(thd)_3$, H_2O/O_3	225°C	14

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