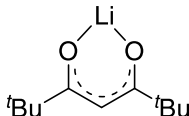


Catalog # 03-5001 2,2,6,6-Tetramethyl-3,5-heptanedionato lithium, 98+% [Li(TMHD)]



## Thermal Behavior:

- Melting point 265-268°C
- Sublimation 175-200°C [1, 2]
- TGA data and diagram are available in [1, 2]

## Technical Notes:

1. Precursor and dopant used for lithium thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Li <sub>2</sub> CO <sub>3</sub>	ALD	175-200°C	2.25 Torr	O <sub>3</sub>	185-300°C	2
LiF	ALD	180°C	3.75 Torr	TiF <sub>4</sub>	250-350°C	3
Li <sub>x</sub> Mn <sub>2</sub> O <sub>4</sub>	ALD	-	-	Mn(thd) <sub>3</sub> , O <sub>3</sub>	225°C	4
LiTPA	ALD	175°C	3.75 Torr	TPA	200-280°C	5
Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub>	LA-CVD	80W CO <sub>2</sub> -laser	3.75 Torr	La(acac) <sub>3</sub> , Zr(acac) <sub>2</sub> , O <sub>2</sub>	600-800°C	6
Li:Na-Al-O	LA-CVD	225°C	6 Torr	Na(thd), Al(acac) <sub>3</sub> , O <sub>2</sub>	830-950°C	7

## References:

1. [J. Electrochem. Soc. 2012, 159, A259.](#)
2. [J. Mater. Chem. 2009, 19, 8767.](#)
3. [Chem. Vap. Deposition 2013, 19, 111.](#)
4. [J. Phys. Chem. C, 2014, 118, 1258.](#)
5. [Nano Lett. 2016, 16, 1276.](#)
6. [J. Electrochem. Soc. 2017, 164, A6131.](#)
7. [Ceram. Int. 2017, 43, 1278.](#)