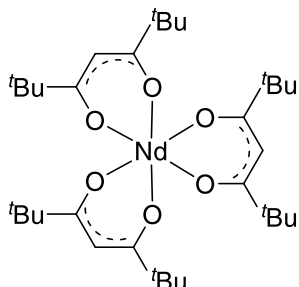


Catalog # 60-8750 Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)neodymium(III), 99% (99.9%-Nd) (REO)
[Nd(TMHD)3]



Thermal Behavior:

- Melting point: 209-212°C
- Decomposition: 270°C
- Sublimation: 150°/0.1 Torr
- TGA data and diagram are available in [1]

Technical Notes:

1. Precursor and dopant for thin neodymium film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Nd ₂ O ₃	ALD	161-164°C	1.5-2.25 Torr	O ₃	300°C	2
NdAl _x O _y	ALD	161-164°C	1.5-2.25 Torr	O ₃ , AlMe ₃ /H ₂ O	200-450°C	3
NdY _x O _y	AA-CVD	BuOH solution	AP	Y(acac) ₃	440°C	4
NdZn _x O _y	AA-CVD	MeOH/BuOH solution	AP	Zn(OAc) ₂	370-500°C	5
DyYb _x Ti _y O _z	ALD	130°C	-	Dy(thd) ₃ , TiCl ₄ , O ₃ , H ₂ O	300°C	6
NdMn _x O _y	CVD	DME solution 230°C	-	Mn(thd) ₃ , O ₂	680°C	7

References:

1. [Russ. J. Appl. Chem. 2017, 90, 1062.](#)
2. [Thin Solid Films, 2005, 472, 275.](#)
3. [Thin Solid Films, 2005, 479, 152.](#)
4. [Chem. Phys. Lett. 2014, 612, 1.](#)
5. [J. Alloys Compd. 2015, 651, 756.](#)
6. [J. Vac. Sci. Technol. A, 2016, 34, 01A130.](#)
7. [Superlattices Microstruct. 2021, 150, 106789.](#)