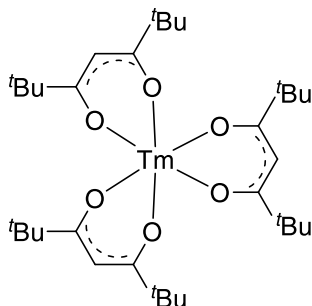


Catalog # 69-7000 Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)thulium(III), 98% (99.9%-Tm) (REO)  
[Tm(TMHD)<sub>3</sub>]



Thermal Behavior:

- Melting point 169-172°C
- Boiling point dec. 280°C
- Sublimation 217-245°C [1]

Technical Notes:

1. Used for the thulium thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Tm <sub>2</sub> O <sub>3</sub>	ALD ALD	125-128°C 180°C	1.5-2.25 Torr -	O <sub>3</sub> O <sub>3</sub>	300°C 380°C	2 3-4

References:

1. [Thermochim. Acta, 1991, 175, 91.](#)
2. [Thin Solid Films, 2005, 472, 275.](#)
3. [Nanomaterials 2019, 9, 413.](#)
4. [J. Phys. D, Appl. Phys. 2020, 53, 215104.](#)