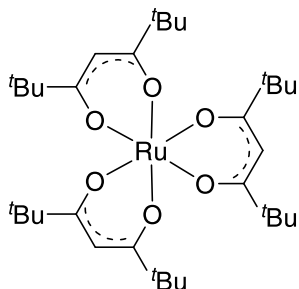


Catalog # 44-8000 Tris(2,2,6,6-tetramethyl-3,5-heptanedionato)ruthenium(III), 99% (99.9%-Ru)
[Ru(TMHD)3]



Thermal Behavior:

- Melting point: 210-213°C; 215-217 [1]
- Decomposition: 250°C
- Sublimation: 120°C/0.5 Torr
- TGA data and diagram are available in [2, 4]

Technical Notes:

1. Precursor for thin ruthenium film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
RuO _x	CVD	THF, 250°C	5 Torr	O ₂	275-450°C	3
	ALD	180°C	37.5-75 Torr	-	200°C	4
	ALD	CyEt sol.	AP	O ₂	330-380°C	5
	ALD	100°C	7.5 Torr	O ₂	325-450°C	6-7

References:

1. [Catal. Commun. 2008, 9, 2068.](#)
2. [Thin Solid Films 2002, 413, 237.](#)
3. [Jpn. J. Appl. Phys. 2002, 41, L347.](#)
4. [Appl. Catal. A, 2003, 241, 51.](#)
5. [J. Phys. Chem. C, 2009, 113, 11329.](#)
6. [Chem. Vap. Deposition, 2004, 10, 215.](#)
7. [Chem. Mater. 2022, 34, 8379.](#)