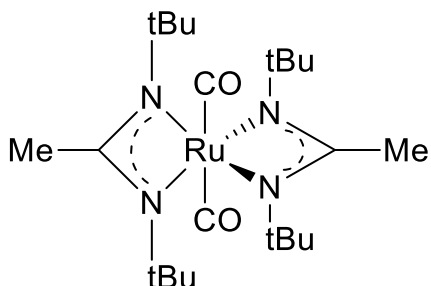


Catalog # 44-0056 Bis(N,N-di-t-butylacetamidinato)ruthenium(II) dicarbonyl, 98% (99.99%-Ru)  
PURATREM



Thermal Behavior:

- Vapor pressure 0.055 Torr at 130 °C [3]
- TGA available in [3]
- Sublimation at 130 °C at 55 mTorr [3]
- Melting point: 204 °C [3]

Technical Notes:

1. Precursor for the CVD and ALD of ruthenium metal and oxide thin films.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Ru	ALD	130 °C		NH <sub>3</sub>	200-300 °C	[1, 2]
Ru	ALD	140 °C	0.3 Torr	O <sub>2</sub>	300-400 °C	[4]
Ru	CVD	130 °C	4.8 Torr	-	200-300 °C	[1]
Ru <sub>2</sub> O	CVD	140 °C	0.45 Torr	O <sub>2</sub>	280 °C	[5]

References:

1. [J. Electrochem. Soc. 2007, 154, D642](#)
2. [J. Appl. Phys. 2007, 101, 124503](#)
3. [Open Inorg. Chem. J. 2008, 2, 11](#)
4. [Chem. Vap. Deposition 2009, 15, 312](#)
5. [Cryst. Growth Des. 2013, 13, 1316](#)