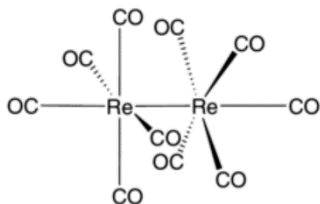


Catalog # 75-1800 Rhenium carbonyl, 98%



Thermal Behavior:

- Melting point at 155- 161 °C. [5]
- Vapor pressure 1.4 mbar at 120 °C and studied in detail in reference [5].
- Solid-state decomposition at 260 °C [5]

Technical Notes:

1. Carbonyl precursor for the deposition of **rhenium containing** thin films by CVD and ALD with high volatility.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Re	CVD	70 °C		no	500-700 °C	[1]
Re	CVD		0.8 mTorr		450 °C	[2]
Re	CVD	90 °C	10 Torr	H ₂	350-550 °C	[4]
Re	CVD	40-80 °C	4 X 10 ⁻⁵ Torr	O ₂	135-300 °C	[6]
ReS ₂	CVD	210 °C		S	550-850 °C	[3]

References:

1. [JLCM, 1989, 152, 177.](#)
2. [J. Organomet. Chem., 1998, 553, 443.](#)
3. [Chem. Mater., 2008, 20, 3587.](#)
4. [J. Struct. Chem., 2009, 50, 1126.](#)
5. [J. Chem. Thermodynamics, 2011, 43, 1646.](#)
6. [Surf. Sci., 2015, 640, 2.](#)