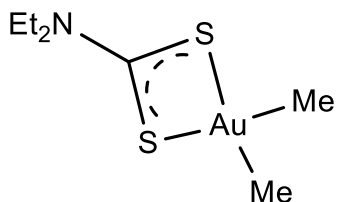


Catalog # 79-1700 (N,N-Diethyldithiocarbamato)dimethylgold(III), 97% (99.999%-Au) PURATREM



Thermal Behavior:

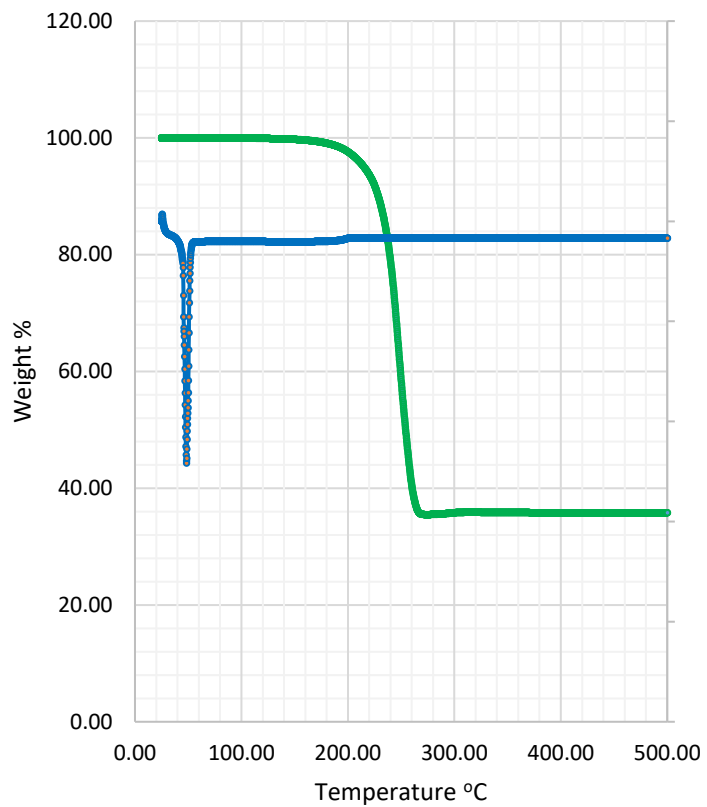
- Melting point: 33°C [1], 38°C [2], 40-44°C [5]
- Sublimation: 180°C/10<sup>-2</sup> Torr [1], 150°C/10<sup>-2</sup> Torr [2], 120-150°C/0.2 Torr [5]
- Vaporization without decomposition: 240°C/1 atm [2]
- Vapor pressure: ~10<sup>-3</sup>-10<sup>-1</sup> Torr/50-90°C [2]
- TGA behavior and diagram are described in [1-2, 5] and below

Technical Notes:

1. Volatile, air, light and thermally stable ALD/CVD precursor for Au thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Au	CVD	90°C	10 Torr	-	210-240°C	2
	CVD	80-100°C	10 Torr	H <sub>2</sub>	150-230°C	3
	CVD	80-100°C	10 Torr	Ar/H <sub>2</sub> , Ar/O <sub>2</sub>	150-230°C	4
	ALD	99°C	3.75-7.5 Torr	O <sub>3</sub>	120-250°C	5

TGA for 79-1700



## References:

1. [J. Struct. Chem., 2007, 48, 108](#)
2. [Gold Bull. 2011, 44, 177](#)
3. [Chem. Vap. Deposition 2012, 18, 336](#)
4. [J. Cryst. Growth 2015, 414, 143](#)
5. [Chem. Mater. 2017, 29, 6130](#)