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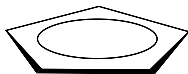
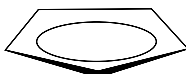
Catalog # 44-6200 Bis(cyclopentadienyl)ruthenium, 99% (99.9%-Ru) (Ruthenocene)



Ru



Thermal Behavior:

- Melting point: 194-198°C [1]
- Sublimation: 120°C/high vacuum [1]
- Vapor pressure: 0.16 Torr/84°C, 0.29 Torr/91°C, 0.50 Torr/97°C [2-3]

Technical Notes:

1. ALD/CVD precursor for ruthenium thin film and nanocomposites deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Ru	ALD ALD CVD PELAD	45-70°C 85°C 95-115°C 85°C	7.5 Torr - 40 mTorr -	O_2 O_2 O_2 $^{PL}O_2$ or $^{Therm}NH_3$	275-400°C 300°C 225-500°C 300°C	4-5 6 7 8
Pt:Ru	ALD PEALD	80°C -	7.5 mTorr -	$MeCpPtMe_3$, O_2 $MeCpPtMe_3$, $^{PL}O_2$	245°C 300°C	9 10
Ru_2O	LPCVD	90°C	4.5 Torr	O_2	400°C	11

References:

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