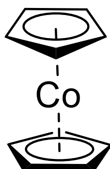
Catalog # 27-0475 Bis(cyclopentadienyl)cobalt(II), min. 98% (Cobaltocene)



Thermal Behavior:

- Vapor pressure: 1.6 Torr at 100 °C [10]
- Melting point: 171-173 °C [1]
- Sublimation at 40 °C/ 0.1 mTorr [1]
- No self-decomposition film growth up to 900 °C [2]
- TGA and vapor pressure study available in [6]

Technical Notes:

1. Thermally stable cyclopentadienyl precursor for the ALD and CVD of Cobalt containing films

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Co	CVD	50 °C	760 Torr	H_2	300-700 °C	[2]
Co	PECVD	100 °C	0.4-0.45 Torr	Ar plasma	35-50 °C	[11]
Co	PEALD	80 °C	15 mTorr	NH_3-, N_2-, H_2 plasma	300 °C	[8]
CoO_x	CVD	60 °C	19.4 Torr	O_2, H_2O	450-550 °C	[3]
Co_3O_4	ALD	100 °C	12 Torr	O_3	250 °C	[10]
CoO_x	PEALD	100 °C	0.1 Torr	O_2 plasma	200 °C	[9]
$CoSi_x$	CVD	50 °C	760 Torr	SiH4, Si_2H_6, H_2	500-900 °C	[2]
$Co_3(PO_4)_2$	PEALD	80 °C	0.015 Torr	$PO(OMe_3)_3$	300 °C	[12]
Co_xZr_yO	CVD	85 °C	0.6 Torr	O_2, H_2O, $Zr(Cp)_2(Me)_2$	450-900 °C	[3]
$CoAl_2O_4$	CVD	75 °C	2 Torr	O_2, H_2O, $AlMe_2(O^iPr)$	500, 900 °C	[4]
$Co_xFe_{3-x}O_4$	ALD	60 °C	0.2 Torr	$Fe(Cp)_2$, O_2	450 °C	[5]
$LiCoO_2$	PEALD	80 °C	0.015 Torr	LiO^tBu, O_2 plasma	325 °C	[7]

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