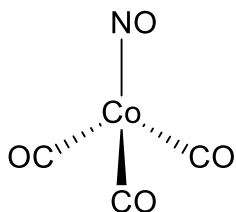


Catalog # 27-0500 Cobalt tricarbonyl nitrosyl



Thermal Behavior:

- Vapor pressure: 26 Torr at 0 °C [3]
- Melting point: -112 °C [1]
- Boiling point: 78 °C [1]
- Thermal decomposition: 130-140 °C [5]

Technical Notes:

1. Volatile carbonyl precursor for the growth of cobalt films

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Co, CoSi ₂	CVD	0 °C	1.5 Torr	H ₂ , Si substrate	390 °C	[3]
Co	CVD	-20 to 0 °C			25 °C	[4]
Co	EE-ALD	20 °C	7.5 μTorr			[7]
Co	FEBID	20 °C	2 μTorr		25-250 °C	[5]
Co	FXBID		69 μTorr			[6]
Fe _x Co	PCVD	-1 to 20 °C	5-10 Torr	Fe(CO) ₅	50 °C	[2]
Co:InP	CVD	25 °C	70 Torr	(Et) ₃ In, PH ₃ , H ₂		[1]

References:

1. [J. Cryst. Growth **1988**, *93*, 576.](#)
2. [Chem. Mater. **1991**, *3*, 13.](#)
3. [J. Electrochem. Soc. **2001**, *148*, C21.](#)
4. [Chem. Commun., **2010**, *46*, 2748.](#)
5. [Nanotechnology **2011**, *22*, 055302.](#)
6. [J. Vac. Sci. Technol. B **2017**, *35*, 031601.](#)
7. [J. Vac. Sci. Technol. A **2019**, *37*, 060906.](#)