Bis(acetylacetonato)cobalt

Other names:	(t-4)-bis(2,4-pentanedionato-O,O')cobalt Acetylacetone cobalt(II) Bis(2,4-pentanedionato)cobalt(II) Bis(acetylacetonato)cobalt(II) Cobalt bis(acetylacetonate) Cobalt diacetylacetonate Cobalt(2+) acetylacetonate Cobalt(II) 2,4-pentanedionate Cobalt(II) acetylacetonate Cobalt(II) bis(acetylacetonate) Cobalt, bis(2,4-pentanedionato)- Cobalt, bis(2,4-pentanedionato-O,O')- Cobalt, bis(2,4-pentanedionato-O,O')-, (T-4)- Cobalt, bis(2,4-pentanedionato-«kappa»O,«kappa»O')-, (SP-4-1)- Cobalt, bis(2,4-pentanedionato-«kappa»O2,«kappa»O4)-, (SP-4-1)- Cobaltous acetylacetonate NSC 4652 bis(2,4-pentanedionato)cobalt cobalt acetylacetonate cobalt(II) 4-oxopent-2-en-2-olate
Inchi:	InChI=1S/2C5H8O2.Co/c2*1-4(6)3-5(2)7;/h2*3,6H,1-2H3;/q;;+2/p-2/b2*4-3-;
InchiKey:	UTYYEGLZLFAFDI-FDGPNNRMSA-L
Formula:	C10H14CoO4
SMILES:	CC(=O)C=C(C)[O-].CC(=O)C=C(C)[O-].[Co]
Mol. weight [g/mol]:	257.15
CAS:	14024-48-7

Physical Properties

Property code	Value	Unit	Source
hsub	130.10 ± 6.30	kJ/mol	NIST Webbook
hsub	118.70 ± 2.20	kJ/mol	NIST Webbook
ie	7.60	eV	NIST Webbook
ie	8.54 ± 0.05	eV	NIST Webbook
ie	7.93	eV	NIST Webbook
ie	8.50	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	149.00	kJ/mol	448.00	NIST Webbook
hsubt	81.20	kJ/mol	370.00	NIST Webbook

Sources

Solubility of beta-Diketonate Complexes of Copper(II) and Cobalt(II) in Supercritical Carbon Dioxide:	https://www.doi.org/10.1021/je101255v
NIST Webbook	http://webbook.nist.gov/cgi/cbook.cgi?ID=C14024487&Units=SI

Legend

hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
ie:	Ionization energy

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