Dicobalt octacarbonyl

Other names:	Cobalt, di-«mu»-carbonylhexacarbonyldi-, (Co-Co)
	Cobalt carbonyl (Co2(CO)8)
	Cobalt tetracarbonyl dimer
	Di-«mu»-carbonylhexacarbonyldicobalt
	Dicobalt carbonyl (Co2(CO)8)
	Octacarbonyldicobalt
	Co2(CO)8
	Cobalt carbonyl
	Cobalt, di-«mu»-carbonylhexacarbonyldi-
	Cobalt octacarbonyl
Inchi:	InChI=1S/8CO.2Co/c8*1-2;;
InchiKey:	NFWSABSVGZVHCA-UHFFFAOYSA-N
Formula:	C8Co2O8
SMILES:	[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[Co].[Co]
Mol. weight [g/mol]:	341.95
CAS:	10210-68-1

Physical Properties

Property code	Value	Unit	Source
hf	-1183.00 ± 9.10	kJ/mol	NIST Webbook
hf	-1185.20 ± 9.40	kJ/mol	NIST Webbook
hf	-1184.10 ± 6.90	kJ/mol	NIST Webbook
hfs	-1248.20 ± 8.50	kJ/mol	NIST Webbook
hfs	-1250.40 ± 8.80	kJ/mol	NIST Webbook
hfs	-1249.30 ± 6.10	kJ/mol	NIST Webbook
hsub	65.20 ± 3.30	kJ/mol	NIST Webbook
hsub	65.20 ± 3.30	kJ/mol	NIST Webbook
ie	8.30 ± 0.10	eV	NIST Webbook
ie	8.12 ± 0.22	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	84.30 ± 0.50	kJ/mol	271.00	NIST Webbook

hsubt	103.80	kJ/mol	301.50	NIST Webbook
hsubt	75.30 ± 6.30	kJ/mol	247.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C10210681&Units=SI

Legend

hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation at standard conditions
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
ie: Ionization energy

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