Manganese, tricarbonyl(«eta»5-2,4-cyclopentadien-1-yl)-

Other names: Manganese, tricarbonyl-«pi»-cyclopentadienyl-
«pi»-Cyclopentadienylmanganese tricarbonyl
Cyclopentadienylmanganese tricarbonyl
Cyclopentadienyltricarbonylmanganese
Cymantrene
Manganese, cyclopentadienyltricarbonyl-
Tricarbonyl-«pi»-cyclopentadienylmanganese
Tricarbonylcyclopentadienylmanganese
(«eta»

Inchi: InChI=1S/C5H5.3CO.Mn/c1-2-4-5-3-1;3*1-2;/h1-5H;;;;

InchiKey: CZPHEHHRMHXAIK-UHFFFAOYSA-N

Formula: C8H5MnO3

SMILES: [C-]#[O+].[C-]#[O+].[C-]#[O+].[CH]1C=CC=C1.[Mn]

Mol. weight [g/mol]: 204.06

CAS: 12079-65-1

Physical Properties

Property code	Value	Unit	Source
chs	-3858.10 ± 4.20	kJ/mol	NIST Webbook
chs	-3841.30 ± 8.40	kJ/mol	NIST Webbook
hf	-473.50 ± 5.40	kJ/mol	NIST Webbook
hf	-490.30 ± 9.00	kJ/mol	NIST Webbook
hf	-426.00 ± 3.00	kJ/mol	NIST Webbook
hf	-481.90 ± 9.00	kJ/mol	NIST Webbook
hfs	-525.90 ± 4.40	kJ/mol	NIST Webbook
hfs	-542.70 ± 8.50	kJ/mol	NIST Webbook
hfs	-534.30 ± 8.40	kJ/mol	NIST Webbook
hfs	-478.00 ± 1.00	kJ/mol	NIST Webbook
hsub	72.00 ± 3.90	kJ/mol	NIST Webbook
hsub	76.00 ± 0.40	kJ/mol	NIST Webbook
hsub	52.40 ± 3.10	kJ/mol	NIST Webbook
ie	7.60	eV	NIST Webbook
ie	8.06 ± 0.01	eV	NIST Webbook
ie	8.12	eV	NIST Webbook
ie	8.10 ± 0.10	eV	NIST Webbook
ie	8.10 ± 0.10	eV	NIST Webbook
ie	8.30 ± 0.40	eV	NIST Webbook

ie	8.05	eV	NIST Webbook
ie	8.05	eV	NIST Webbook
ss	259.35	J/mol×K	NIST Webbook
tt	350.00 ± 2.00	K	NIST Webbook
tt	350.00 ± 2.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	214.79	J/mol×K	298.15	NIST Webbook
hfust	19.30	kJ/mol	350.00	NIST Webbook
hfust	18.90	kJ/mol	350.10	NIST Webbook
hfust	19.30	kJ/mol	350.00	NIST Webbook
hsubt	72.20 ± 3.90	kJ/mol	294.00	NIST Webbook
hsubt	75.80 ± 0.40	kJ/mol	305.00	NIST Webbook
hsubt	52.70 ± 3.10	kJ/mol	338.00	NIST Webbook
hsubt	64.00 ± 12.00	kJ/mol	339.00	NIST Webbook
hvapt	50.80	kJ/mol	421.00	NIST Webbook
sfust	55.00	J/mol×K	350.00	NIST Webbook
sfust	55.00	J/mol×K	350.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C12079651&Units=SI

Legend

chs: Standard solid enthalpy of combustion
cps: Solid phase heat capacity
hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation at standard conditions
hfust: Enthalpy of fusion at a given temperature
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
hvapt: Enthalpy of vaporization at a given temperature
ie: Ionization energy

sfust:	Entropy of fusion at a given temperature
ss:	Solid phase molar entropy at standard conditions
tt:	Triple Point Temperature

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