

Dimanganese decacarbonyl

Other names:	Mn ₂ (CO) ₁₀ Manganese carbonyl Manganese, decacarbonyldi-, Decacarbonyldimanganese Manganese carbonyl (Mn ₂ (CO) ₁₀) Manganese, decacarbonyldi-, (Mn-Mn)
Inchi:	InChI=1S/10CO.2Mn/c10*1-2;;
InchiKey:	QFEOTYVTTQCYAZ-UHFFFAOYSA-N
Formula:	C ₁₀ Mn ₂ O ₁₀
SMILES:	[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].[C-]#[O+].
Mol. weight [g/mol]:	389.98
CAS:	10170-69-1

Physical Properties

Property code	Value	Unit	Source
chs	-3251.00 ± 3.30	kJ/mol	NIST Webbook
hf	-1585.30 ± 4.30	kJ/mol	NIST Webbook
hf	-1582.20 ± 9.40	kJ/mol	NIST Webbook
hf	-1582.80 ± 9.20	kJ/mol	NIST Webbook
hfs	-1677.60 ± 3.70	kJ/mol	NIST Webbook
hfs	-1674.50 ± 9.20	kJ/mol	NIST Webbook
hfs	-1675.10 ± 9.00	kJ/mol	NIST Webbook
hsub	80.30 ± 4.20	kJ/mol	NIST Webbook
hsub	92.30 ± 2.10	kJ/mol	NIST Webbook
hsub	92.30 ± 2.10	kJ/mol	NIST Webbook
ie	8.32 ± 0.01	eV	NIST Webbook
ie	7.70	eV	NIST Webbook
ie	7.69 ± 0.01	eV	NIST Webbook
ie	8.46 ± 0.03	eV	NIST Webbook
ie	8.40 ± 0.10	eV	NIST Webbook
ie	8.55 ± 0.10	eV	NIST Webbook
ie	8.02	eV	NIST Webbook
ie	8.02	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	80.30 ± 2.10	kJ/mol	389.50	NIST Webbook
hvapt	60.70 ± 1.30	kJ/mol	445.50	NIST Webbook

Sources

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C10170691&Units=SI>

Legend

chs:	Standard solid enthalpy of combustion
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
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy

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