

bis(«eta»5-Cyclopentadienyl) chromium

Other names:	Chromocene
Inchi:	bis(«eta»5-cyclopenta-2,4-dien-1-yl)chromium
InchiKey:	INCHI=1S/2C5H5.Cr/c2*1-2-4-5-3-1;/h2*1-5H;
Formula:	C10H10Cr
SMILES:	C12C3C4C5C1[Cr]23451678C2C1C6C7C28
Mol. weight [g/mol]:	182.18
CAS:	1271-24-5

Physical Properties

Property code	Value	Unit	Source
chs	-6112.80 ± 2.10	kJ/mol	NIST Webbook
hf	257.00 ± 3.30	kJ/mol	NIST Webbook
hf	249.30 ± 2.90	kJ/mol	NIST Webbook
hfs	178.30 ± 2.60	kJ/mol	NIST Webbook
hfs	186.00 ± 3.00	kJ/mol	NIST Webbook
hsub	71.00	kJ/mol	NIST Webbook
hsub	62.80 ± 4.20	kJ/mol	NIST Webbook
hsub	71.00 ± 1.30	kJ/mol	NIST Webbook
ie	5.71	eV	NIST Webbook
ie	5.70	eV	NIST Webbook
ie	6.30 ± 0.10	eV	NIST Webbook
ie	5.50	eV	NIST Webbook
ss	236.00	J/mol×K	NIST Webbook
ss	236.00	J/mol×K	NIST Webbook
tf	452.10 ± 0.50	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	198.50	J/mol×K	298.00	NIST Webbook
cps	199.20	J/mol×K	298.15	NIST Webbook
cps	199.10	J/mol×K	298.15	NIST Webbook
hvapt	49.50 ± 1.50	kJ/mol	485.50	NIST Webbook

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1271245&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
hsub:	Enthalpy of sublimation at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
ss:	Solid phase molar entropy at standard conditions
tf:	Normal melting (fusion) point

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