

Iron, tris(1,1,1-trifluoro-2,4-pentanedionato)-

Other names:	Ferric trifluoroacetylacetonate
Inchi:	InChI=1S/3C5H5F3O2.Fe/c3*1-3(9)2-4(10)5(6,7)8;/h3*2,9H,1H3;/q;;;+3/p-3/b3*3-2-;
InchiKey:	FGBQLUGZEFCSTF-IQMQLBNYSA-K
Formula:	C15H12F9FeO6
SMILES:	CC(=CC(=O)C(F)(F)F)O[Fe](OC(C)=CC(=O)C(F)(F)F)OC(C)=CC(=O)C(F)(F)F
Mol. weight [g/mol]:	515.08
CAS:	14526-22-8

Physical Properties

Property code	Value	Unit	Source
ie	8.90 ± 0.20	eV	NIST Webbook
ie	8.83 ± 0.05	eV	NIST Webbook
ie	9.10 ± 0.05	eV	NIST Webbook
ie	9.38 ± 0.11	eV	NIST Webbook
ie	9.10	eV	NIST Webbook
ie	9.18 ± 0.07	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	96.00	kJ/mol	388.00	NIST Webbook
hsubt	104.60 ± 0.80	kJ/mol	408.00	NIST Webbook
hsubt	80.30	kJ/mol	433.00	NIST Webbook
hsubt	128.90	kJ/mol	345.00	NIST Webbook
hvapt	87.00 ± 1.20	kJ/mol	410.00	NIST Webbook

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C14526228&Units=SI>

Legend

hsubt: Enthalpy of sublimation at a given temperature

hvapt: Enthalpy of vaporization at a given temperature

ie: Ionization energy

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