Aluminum, tris(1,1,1-trifluoro-2,4-pentanedionato-O,O')-

Other names: Aluminum trifluoroacetylacetonate
Aluminum tris(trifluoroacetylacetonate)
Aluminum, tris(1,1,1-trifluoro-2,4-pentanedionato)-
Tris(1,1,1-trifluoro-2,4-pentanedionato)aluminum

Inchi: InChI=1S/3C5H5F3O2.Al/c3*1-3(9)2-4(10)5(6,7)8;/h3*2,9H,1H3;/q;;;+3/p-3/b3-2+;2*3-2-;

InchiKey: NSAWTIQLFWITEH-PJFPACTGSA-K

Formula: C15H12AlF9O6

SMILES: CC(=CC(=O)C(F)(F)F)O[AlH3](OC(C)=CC(=O)C(F)(F)F)OC(C)=CC(=O)C(F)(F)F

Mol. weight [g/mol]: 486.22

CAS: 14354-59-7

Physical Properties

Property code	Value	Unit	Source
ie	8.70 ± 0.20	eV	NIST Webbook
ie	8.81 ± 0.05	eV	NIST Webbook
ie	8.70	eV	NIST Webbook
ie	9.10 ± 0.10	eV	NIST Webbook
ie	9.22 ± 0.07	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	74.00	kJ/mol	388.00	NIST Webbook
hsubt	113.40 ± 1.30	kJ/mol	393.00	NIST Webbook
hsubt	102.70 ± 3.20	kJ/mol	380.50	NIST Webbook
hsubt	43.10	kJ/mol	443.00	NIST Webbook
hsubt	93.70 ± 6.70	kJ/mol	375.00	NIST Webbook
hvapt	58.70 ± 0.70	kJ/mol	380.00	NIST Webbook
hvapt	69.60 ± 0.50	kJ/mol	438.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C14354597&Units=SI

Legend

hsubt:	Enthalpy of sublimation at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy