

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

Other names:	Chromium, tris(1,1,1-trifluoro-2,4-pentanedionato)- Chromium trifluoroacetylacetonate Chromium tris(1,1,1-trifluoro-2,4-pentanedionate) Chromium(III) trifluoroacetylacetonate Tris(trifluoroacetylacetonato)chromium Tris(1,1,1-trifluoro-2,4-pentanedionato)chromium
Inchi:	InChI=1S/3C5H5F3O2.Cr/c3*1-3(9)2-4(10)5(6,7)8;/h2*2,10H,1H3;2,9H,1H3;/q;;;+3/p-3/b
InchiKey:	LGUIEMQEIFNKHB-RQQUGGEB SA-K
Formula:	C ₁₅ H ₁₂ CrF ₉ O ₆
SMILES:	CC(=O)C=C([O-])C(F)(F)F.CC(=O)C=C([O-])C(F)(F)F.CC([O-])=CC(=O)C(F)(F)F.[Cr]
Mol. weight [g/mol]:	511.23
CAS:	14592-89-3

Physical Properties

Property code	Value	Unit	Source
hsub	117.00 ± 4.00	kJ/mol	NIST Webbook
ie	8.20 ± 0.20	eV	NIST Webbook
ie	9.09 ± 0.05	eV	NIST Webbook
ie	8.58 ± 0.07	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	108.80 ± 1.30	kJ/mol	395.00	NIST Webbook
hsubt	71.00	kJ/mol	388.00	NIST Webbook
hsubt	182.00 ± 4.00	kJ/mol	426.00	NIST Webbook
hsubt	115.10 ± 0.80	kJ/mol	405.50	NIST Webbook
hsubt	112.50 ± 4.80	kJ/mol	413.00	NIST Webbook
hsubt	53.60	kJ/mol	447.00	NIST Webbook
hvapt	76.70 ± 0.60	kJ/mol	455.00	NIST Webbook

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C14592893&Units=SI>

Legend

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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