trimethylgallium

Other names: Gallium trimethyl
Inchi: InChI=1S/3CH3.Ga/h3*1H3;
InchiKey: XCZXGTMEAKBVPV-UHFFFAOYSA-N
Formula: C3H9Ga
SMILES: C[Ga](C)C
Mol. weight [g/mol]: 114.83
CAS: 1445-79-0

Physical Properties

Property code	Value	Unit	Source
chl	-2933.00 ± 7.90	kJ/mol	NIST Webbook
hf	-36.00 ± 10.00	kJ/mol	NIST Webbook
hf	-25.70 ± 9.90	kJ/mol	NIST Webbook
hf	-46.20 ± 8.10	kJ/mol	NIST Webbook
hfl	-58.80 ± 9.90	kJ/mol	NIST Webbook
hfl	-79.30 ± 8.10	kJ/mol	NIST Webbook
hfl	-69.00 ± 10.00	kJ/mol	NIST Webbook
hvap	33.10 ± 0.80	kJ/mol	NIST Webbook
ie	9.76	eV	NIST Webbook
ie	9.87 ± 0.02	eV	NIST Webbook
ie	8.90	eV	NIST Webbook
sl	252.10	J/mol×K	NIST Webbook
tt	257.81 ± 0.02	K	NIST Webbook
tt	257.90 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	188.00	J/mol×K	298.15	NIST Webbook
cpl	178.87	J/mol×K	298.15	NIST Webbook
hfust	11.05	kJ/mol	257.90	NIST Webbook
hfust	11.05	kJ/mol	257.90	NIST Webbook
hsubt	47.40	kJ/mol	241.00	NIST Webbook
hsubt	45.20	kJ/mol	252.00	NIST Webbook

hvapt	35.60	kJ/mol	261.00	NIST Webbook
sfust	42.83	J/mol×K	257.90	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1445790&Units=SI

Legend

chl: Standard liquid enthalpy of combustion
cpl: Liquid phase heat capacity
hf: Enthalpy of formation at standard conditions
hfl: Liquid phase enthalpy of formation at standard conditions
hfust: Enthalpy of fusion at a given temperature
hsubt: Enthalpy of sublimation at a given temperature
hvap: Enthalpy of vaporization at standard conditions
hvapt: Enthalpy of vaporization at a given temperature
ie: Ionization energy
sfust: Entropy of fusion at a given temperature
sl: Liquid phase molar entropy at standard conditions
tt: Triple Point Temperature