

Stibine, triethyl-

Other names: (C2H5)3Sb
triethylantimony
triethylstibine

Inchi: InChI=1S/3C2H5.Sb/c3*1-2;/h3*1H2,2H3;

InchiKey: KKOFCVMVBJXDFP-UHFFFAOYSA-N

Formula: C6H15Sb

SMILES: CC[Sb](CC)CC

Mol. weight [g/mol]: 208.94

CAS: 617-85-6

Physical Properties

Property code	Value	Unit	Source
chl	-4864.00 ± 11.00	kJ/mol	NIST Webbook
hf	49.00 ± 12.00	kJ/mol	NIST Webbook
hfl	5.00 ± 11.00	kJ/mol	NIST Webbook
hvap	45.60	kJ/mol	NIST Webbook
hvap	43.50 ± 4.20	kJ/mol	NIST Webbook
ie	13.00 ± 0.30	eV	NIST Webbook
ie	9.20 ± 0.30	eV	NIST Webbook
tt	153.90 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	242.25	J/mol×K	298.15	NIST Webbook
hfust	9.45	kJ/mol	153.90	NIST Webbook
hfust	9.45	kJ/mol	153.90	NIST Webbook
hfust	9.45	kJ/mol	153.90	NIST Webbook
hvapt	44.20	kJ/mol	273.50	NIST Webbook
hvapt	47.60	kJ/mol	273.50	NIST Webbook
hvapt	41.80	kJ/mol	333.00	NIST Webbook
hvapt	38.30	kJ/mol	273.50	NIST Webbook
hvapt	41.40	kJ/mol	273.50	NIST Webbook
hvapt	39.90 ± 1.30	kJ/mol	263.00	NIST Webbook

pvap	0.17	kPa	283.49	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	9.89e-03	kPa	248.47	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	0.02	kPa	253.48	Vapour pressure measurement of metal organic precursors used for MOVPE
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pvap	0.02	kPa	258.48	Vapour pressure measurement of metal organic precursors used for MOVPE
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pvap	0.04	kPa	263.48	Vapour pressure measurement of metal organic precursors used for MOVPE
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pvap	0.06	kPa	268.48	Vapour pressure measurement of metal organic precursors used for MOVPE
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pvap	9.91e-03	kPa	248.47	Vapour pressure measurement of metal organic precursors used for MOVPE
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pvap	0.52	kPa	301.00	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	9.90e-03	kPa	248.47	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	9.90e-03	kPa	248.47	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	6.10e-03	kPa	243.46	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	6.10e-03	kPa	243.46	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	6.11e-03	kPa	243.46	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	6.11e-03	kPa	243.46	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	3.70e-03	kPa	238.42	Vapour pressure measurement of metal organic precursors used for MOVPE

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pvap	3.70e-03	kPa	238.42	Vapour pressure measurement of metal organic precursors used for MOVPE
pvap	3.70e-03	kPa	238.42	Vapour pressure measurement of metal organic precursors used for MOVPE
sfust	61.42	J/mol×K	153.90	NIST Webbook

Sources

Vapour pressure measurement of metal organic precursors used for MOVPE: <https://www.doi.org/10.1016/j.jct.2005.05.018>
NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C617856&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
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
pvap:	Vapor pressure
sfust:	Entropy of fusion at a given temperature
tt:	Triple Point Temperature

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