

Stibine, trimethyl-

Other names:	(CH3)3Sb Trimethylantimony Trimethylstibine
Inchi:	InChI=1S/3CH3.Sb/h3*1H3;
InchiKey:	PORFVJURJXKREL-UHFFFAOYSA-N
Formula:	C3H9Sb
SMILES:	C[Sb](C)C
Mol. weight [g/mol]:	166.86
CAS:	594-10-5

Physical Properties

Property code	Value	Unit	Source
chl	-2921.00 ± 25.00	kJ/mol	NIST Webbook
hf	32.00 ± 25.00	kJ/mol	NIST Webbook
hfl	1.00 ± 25.00	kJ/mol	NIST Webbook
hvap	32.50 ± 0.01	kJ/mol	NIST Webbook
hvap	31.40 ± 1.30	kJ/mol	NIST Webbook
hvap	31.40 ± 1.30	kJ/mol	NIST Webbook
ie	7.70	eV	NIST Webbook
ie	8.04 ± 0.16	eV	NIST Webbook
ie	8.48	eV	NIST Webbook
ie	8.48	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
pvap	0.97	kPa	249.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	0.97	kPa	249.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony

pvap	1.04	kPa	250.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.04	kPa	250.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.04	kPa	250.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.11	kPa	251.23	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.11	kPa	251.23	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.11	kPa	251.23	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.19	kPa	252.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.19	kPa	252.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.19	kPa	252.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.26	kPa	253.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.26	kPa	253.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.26	kPa	253.21	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony

pvap	1.73	kPa	258.19	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.73	kPa	258.19	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	1.73	kPa	258.19	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	2.35	kPa	263.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	2.34	kPa	263.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	2.34	kPa	263.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	3.13	kPa	268.30	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	3.14	kPa	268.30	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	3.14	kPa	268.30	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	4.14	kPa	273.35	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	4.14	kPa	273.35	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	4.14	kPa	273.35	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony

pvap	5.40	kPa	278.36	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	5.40	kPa	278.36	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	5.40	kPa	278.36	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	6.94	kPa	283.33	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	6.94	kPa	283.33	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	6.94	kPa	283.33	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	6.94	kPa	283.33	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	8.82	kPa	288.27	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	8.82	kPa	288.27	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	8.82	kPa	288.27	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	9.90	kPa	290.71	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	9.90	kPa	290.71	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony

pvap	9.90	kPa	290.71	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	11.13	kPa	293.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	11.13	kPa	293.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	11.13	kPa	293.24	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	12.74	kPa	296.22	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	12.74	kPa	296.22	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony
pvap	12.73	kPa	296.22	Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.56088e+01
Coeff. B	-3.88646e+03
Coeff. C	-1.29000e-01
Temperature range (K), min.	253.79
Temperature range (K), max.	377.55

Sources

Vapor Pressure of Trimethylantimony
and tert-Butyldimethylantimony:
NIST Webbook:

<https://www.doi.org/10.1021/je900372v>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C594105&Units=SI>

The Yaws Handbook of Vapor
Pressure:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

Legend

chl:	Standard liquid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
pvap:	Vapor pressure

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