

Borane, triethyl-

Other names:	Triethylborane Triethylboron (C ₂ H ₅) ₃ B Triethylborine Borethyl
Inchi:	InChI=1S/C6H15B/c1-4-7(5-2)6-3/h4-6H2,1-3H3
InchiKey:	LALRXNPLTWZJIJ-UHFFFAOYSA-N
Formula:	C ₆ H ₁₅ B
SMILES:	CCB(CC)CC
Mol. weight [g/mol]:	97.99
CAS:	97-94-9

Physical Properties

Property code	Value	Unit	Source
ie	9.60	eV	NIST Webbook
ie	9.70 ± 0.10	eV	NIST Webbook
ie	9.00 ± 0.20	eV	NIST Webbook
log10ws	0.16		Crippen Method
logp	2.541		Crippen Method
ss	330.05	J/mol×K	NIST Webbook
ss	338.10	J/mol×K	NIST Webbook
tb	321.81	K	NIST Webbook
tt	180.21 ± 0.05	K	NIST Webbook
tt	180.30 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	240.00	J/mol×K	298.15	NIST Webbook
cps	241.40	J/mol×K	300.00	NIST Webbook
hfust	11.85	kJ/mol	180.30	NIST Webbook
hfust	11.52	kJ/mol	180.21	NIST Webbook
hfust	11.85	kJ/mol	180.30	NIST Webbook
hvapt	3.67	kJ/mol	300.00	NIST Webbook

hvapt	33.60	kJ/mol	293.00	NIST Webbook
sfust	63.94	J/mol×K	180.21	NIST Webbook
svapt	122.00	J/mol×K	300.00	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C97949&Units=SI

Legend

cps:	Solid phase heat capacity
hfust:	Enthalpy of fusion at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
sfust:	Entropy of fusion at a given temperature
ss:	Solid phase molar entropy at standard conditions
svapt:	Entropy of vaporization at a given temperature
tb:	Normal Boiling Point Temperature
tt:	Triple Point Temperature

Latest version available from:

<https://www.chemeo.com/cid/39-679-6/Borane-triethyl.pdf>

Generated by Cheméo on 2024-04-20 05:10:13.135778539 +0000 UTC m=+15879062.056355855.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.