Diethyl tert-butylamine

Other names: 2-Propanamine, 2-methyl, N,N-diethyl
Inchi: InChI=1S/C8H19N/c1-6-9(7-2)8(3,4)5/h6-7H2,1-5H3
InchiKey: UPNQFYMXRSHQBY-UHFFFAOYSA-N
Formula: C8H19N
SMILES: CCN(CC)C(C)(C)C
Mol. weight [g/mol]: 129.24

Physical Properties

Property code	Value	Unit	Source
gf	130.10	kJ/mol	Joback Method
hf	-149.67	kJ/mol	Joback Method
hfus	12.08	kJ/mol	Joback Method
hvap	34.15	kJ/mol	Joback Method
log10ws	-1.85		Crippen Method
logp	2.127		Crippen Method
mcvol	133.560	ml/mol	McGowan Method
pc	2579.34	kPa	Joback Method
rinpol	814.00		NIST Webbook
tb	391.65	K	Joback Method
tc	564.43	K	Joback Method
tf	214.81	K	Joback Method
vc	0.490	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	262.31	J/mol×K	391.65	Joback Method
cpg	277.98	J/mol×K	420.45	Joback Method
cpg	292.90	J/mol×K	449.24	Joback Method
cpg	307.10	J/mol×K	478.04	Joback Method
cpg	320.61	J/mol×K	506.84	Joback Method
cpg	333.45	J/mol×K	535.63	Joback Method
cpg	345.65	J/mol×K	564.43	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R12903&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume