Hexadecylamine, N,N-diethyl

Inchi: InChI=1S/C20H43N/c1-4-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21(5-2)6-3/h4-20H2,1
InchiKey: AVOKRHSASDONRL-UHFFFAOYSA-N
Formula: C20H43N
SMILES: CCCCCCCCCCCCCCCCN(CC)CC
Mol. weight [g/mol]: 297.56

Physical Properties

Property code	Value	Unit	Source
gf	228.30	kJ/mol	Joback Method
hf	-388.60	kJ/mol	Joback Method
hfus	50.58	kJ/mol	Joback Method
hvap	62.16	kJ/mol	Joback Method
log10ws	-6.76		Crippen Method
logp	6.809		Crippen Method
mcvol	302.640	ml/mol	McGowan Method
pc	1014.24	kPa	Joback Method
rinpol	2043.00		NIST Webbook
tb	669.44	K	Joback Method
tc	830.16	K	Joback Method
tf	347.63	K	Joback Method
vc	1.173	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	883.36	J/mol×K	669.44	Joback Method
cpg	904.53	J/mol×K	696.23	Joback Method
cpg	924.80	J/mol×K	723.01	Joback Method
cpg	944.20	J/mol×K	749.80	Joback Method
cpg	962.77	J/mol×K	776.58	Joback Method
cpg	980.54	J/mol×K	803.37	Joback Method
cpg	997.52	J/mol×K	830.16	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=R543167&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