Methylamine, N,N-bis(N.-hexadecyl)-

Other names: 1-Hexadecanamine, N-hexadecyl-N-methyl-
Inchi: InChI=1S/C33H69N/c1-4-6-8-10-12-14-16-18-20-22-24-26-28-30-32-34(3)33-31-29-27-2
InchiKey: KCMTVIZYKDBFFS-UHFFFAOYSA-N
Formula: C33H69N
SMILES: CCCCCCCCCCCCCCCCN(C)CCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 479.91
CAS: 16724-61-1

Physical Properties

Property code	Value	Unit	Source
gf	337.76	kJ/mol	Joback Method
hf	-656.92	kJ/mol	Joback Method
hfus	84.25	kJ/mol	Joback Method
hvap	91.09	kJ/mol	Joback Method
log10ws	-12.21		Crippen Method
logp	11.881		Crippen Method
mcvol	485.810	ml/mol	McGowan Method
pc	519.36	kPa	Joback Method
tb	966.88	K	Joback Method
tc	1214.43	K	Joback Method
tf	307.65 ± 2.00	K	NIST Webbook
vc	1.901	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1734.27	J/mol×K	966.88	Joback Method
cpg	1765.93	J/mol×K	1008.14	Joback Method
cpg	1795.50	J/mol×K	1049.40	Joback Method
cpg	1823.14	J/mol×K	1090.66	Joback Method
cpg	1849.04	J/mol×K	1131.92	Joback Method
cpg	1873.36	J/mol×K	1173.18	Joback Method
cpg	1896.28	J/mol×K	1214.43	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=C16724611&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume