Trimethylamine, 1-cyclohexyl-

Other names:	1-Cyclohexyltrimethylamine
	N,N-Dimethyl-N-cyclohexylmethylamine
	c-C6H11CH2N(CH3)2
	Cyclohexanemethanamine, N,N-dimethyl-
Inchi:	InChI=1S/C9H19N/c1-10(2)8-9-6-4-3-5-7-9/h9H,3-8H2,1-2H3
InchiKey:	MNKFLCYZIHOFRQ-UHFFFAOYSA-N
Formula:	C9H19N
SMILES:	CN(C)CC1CCCCC1
Mol. weight [g/mol]:	141.25
CAS:	16607-80-0

Physical Properties

Property code	Value	Unit	Source
affp	975.60	kJ/mol	NIST Webbook
basg	944.70	kJ/mol	NIST Webbook
gf	160.13	kJ/mol	Joback Method
hf	-107.24	kJ/mol	Joback Method
hfus	13.92	kJ/mol	Joback Method
hvap	38.10	kJ/mol	Joback Method
log10ws	-1.81		Crippen Method
logp	2.128		Crippen Method
mcvol	136.790	ml/mol	McGowan Method
pc	2832.35	kPa	Joback Method
tb	446.15 ± 3.00	K	NIST Webbook
tc	633.91	K	Joback Method
tf	231.04	K	Joback Method
vc	0.490	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	287.42	J/mol×K	437.31	Joback Method
cpg	306.91	J/mol×K	470.08	Joback Method
cpg	325.41	J/mol×K	502.84	Joback Method

cpg	342.97	J/mol×K	535.61	Joback Method
cpg	359.60	J/mol×K	568.38	Joback Method
cpg	375.33	J/mol×K	601.15	Joback Method
cpg	390.21	J/mol×K	633.91	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=C16607800&Units=SI

Legend

affp: Proton affinity
basg: Gas basicity
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