Piperazine, 2,3,5,6-tetramethyl-

Inchi: InChI=1S/C8H18N2/c1-5-6(2)10-8(4)7(3)9-5/h5-10H,1-4H3
InchiKey: ICGDKKACLISIAM-UHFFFAOYSA-N
Formula: C8H18N2
SMILES: CC1NC(C)C(C)NC1C
Mol. weight [g/mol]: 142.24
CAS: 6135-46-2

Physical Properties

Property code	Value	Unit	Source
gf	193.22	kJ/mol	Joback Method
hf	-139.53	kJ/mol	Joback Method
hfus	30.70	kJ/mol	Joback Method
hvap	46.42	kJ/mol	Joback Method
log10ws	-1.89		Crippen Method
logp	0.733		Crippen Method
mcvol	132.680	ml/mol	McGowan Method
pc	2986.06	kPa	Joback Method
tb	485.08	K	Joback Method
tc	699.57	K	Joback Method
tf	384.64	K	Joback Method
vc	0.487	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	305.16	J/mol×K	485.08	Joback Method
cpg	324.12	J/mol×K	520.83	Joback Method
cpg	342.32	J/mol×K	556.58	Joback Method
cpg	359.77	J/mol×K	592.33	Joback Method
cpg	376.43	J/mol×K	628.08	Joback Method
cpg	392.29	J/mol×K	663.82	Joback Method
cpg	407.34	J/mol×K	699.57	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=C6135462&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