

cis-(5,12)-7,7,14,14-Hexamethyl-1,4,8,11-tetraazac

Inchi:	InChI=1S/C16H36N4/c1-13-11-15(3,4)19-10-8-18-14(2)12-16(5,6)20-9-7-17-13/h13-14,1
InchiKey:	XHCNINMOALIGKM-UHFFFAOYSA-N
Formula:	C16H36N4
SMILES:	CC1CC(C)(C)NCCNC(C)CC(C)(C)NCCN1
Mol. weight [g/mol]:	284.48
CAS:	56144-66-2

Physical Properties

Property code	Value	Unit	Source
chs	-11207.00 ± 4.60	kJ/mol	NIST Webbook
gf	328.22	kJ/mol	Joback Method
hf	-247.83	kJ/mol	Joback Method
hfs	-234.10 ± 4.60	kJ/mol	NIST Webbook
hfus	41.21	kJ/mol	Joback Method
hvap	76.82	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	1.473		Crippen Method
mcvol	265.360	ml/mol	McGowan Method
pc	1961.34	kPa	Joback Method
tb	799.86	K	Joback Method
tc	1062.59	K	Joback Method
tf	704.50	K	Joback Method
vc	0.942	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	875.46	J/mol×K	799.86	Joback Method
cpg	905.84	J/mol×K	843.65	Joback Method
cpg	934.77	J/mol×K	887.44	Joback Method
cpg	962.40	J/mol×K	931.22	Joback Method
cpg	988.92	J/mol×K	975.01	Joback Method
cpg	1014.48	J/mol×K	1018.80	Joback Method
cpg	1039.24	J/mol×K	1062.59	Joback Method

Sources

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=C56144662&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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

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