Memantine

Other names:	3,5-Dimethyl-1-adamantanamine
	D-145
	DMAA
	3,5-Dimethyladamantan-1-amine
Inchi:	InChI=1S/C12H21N/c1-10-3-9-4-11(2,6-10)8-12(13,5-9)7-10/h9H,3-8,13H2,1-2H3
InchiKey:	BUGYDGFZZOZRHP-UHFFFAOYSA-N
Formula:	C12H21N
SMILES:	CC12CC3CC(C)(C1)CC(N)(C3)C2
Mol. weight [g/mol]:	179.30
CAS:	19982-08-2

Physical Properties

Property code	Value	Unit	Source
gf	262.58	kJ/mol	Joback Method
hf	-19.60	kJ/mol	Joback Method
hfus	6.52	kJ/mol	Joback Method
hvap	49.10	kJ/mol	Joback Method
log10ws	-3.35		Crippen Method
logp	2.694		Crippen Method
mcvol	157.340	ml/mol	McGowan Method
pc	3100.18	kPa	Joback Method
rinpol	1305.00		NIST Webbook
tb	567.03	K	Joback Method
tc	812.78	K	Joback Method
tf	426.02	K	Joback Method
vc	0.593	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	438.17	J/mol×K	567.03	Joback Method
cpg	458.49	J/mol×K	607.99	Joback Method
cpg	477.13	J/mol×K	648.95	Joback Method
cpg	494.62	J/mol×K	689.90	Joback Method

cpg	511.48	J/mol×K	730.86	Joback Method
cpg	528.24	J/mol×K	771.82	Joback Method
cpg	545.42	J/mol×K	812.78	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19982082&Units=SI
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

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