Acetamide, N-cyclohexyl-

Other names:	Acetamidocyclohexane
	N-Cyclohexylacetamide
	N-Acetylcyclohexylamine
Inchi:	InChI=1S/C8H15NO/c1-7(10)9-8-5-3-2-4-6-8/h8H,2-6H2,1H3,(H,9,10)
InchiKey:	WRAGCBBWIYQMRF-UHFFFAOYSA-N
Formula:	C8H15NO
SMILES:	CC(=O)NC1CCCCC1
Mol. weight [g/mol]:	141.21
CAS:	1124-53-4

Physical Properties

Property code	Value	Unit	Source
gf	1.40	kJ/mol	Joback Method
hf	-213.24	kJ/mol	Joback Method
hfus	15.01	kJ/mol	Joback Method
hvap	47.01	kJ/mol	Joback Method
log10ws	-2.14		Crippen Method
logp	1.455		Crippen Method
mcvol	124.270	ml/mol	McGowan Method
pc	3439.94	kPa	Joback Method
rinpol	1268.00		NIST Webbook
rinpol	1313.00		NIST Webbook
ripol	2113.00		NIST Webbook
tb	506.03	K	Joback Method
tc	720.75	K	Joback Method
tf	289.89	K	Joback Method
vc	0.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	287.43	J/mol×K	506.03	Joback Method
cpg	304.07	J/mol×K	541.82	Joback Method
cpg	319.78	J/mol×K	577.60	Joback Method

cpg	334.56	J/mol×K	613.39	Joback Method
cpg	348.46	J/mol×K	649.18	Joback Method
cpg	361.50	J/mol×K	684.96	Joback Method
cpg	373.69	J/mol×K	720.75	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1124534&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume