Formamide, N-cyclohexyl-

Other names:	Cyclohexylformamide
	Formamidocyclohexane
	N-Cyclohexylformamide
Inchi:	InChI=1S/C7H13NO/c9-6-8-7-4-2-1-3-5-7/h6-7H,1-5H2,(H,8,9)
InchiKey:	SWGXDLRCJNEEGZ-UHFFFAOYSA-N
Formula:	C7H13NO
SMILES:	O=CNC1CCCCC1
Mol. weight [g/mol]:	127.18
CAS:	766-93-8

Physical Properties

Property code	Value	Unit	Source
gf	22.38	kJ/mol	Joback Method
hf	-165.60	kJ/mol	Joback Method
hfus	13.11	kJ/mol	Joback Method
hvap	44.76	kJ/mol	Joback Method
log10ws	-1.72		Crippen Method
logp	1.065		Crippen Method
mcvol	110.180	ml/mol	McGowan Method
pc	3916.03	kPa	Joback Method
rinpol	1306.00		NIST Webbook
tb	477.94	K	Joback Method
tc	690.40	K	Joback Method
tf	312.40 ± 0.60	K	NIST Webbook
vc	0.412	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	243.63	J/mol×K	477.94	Joback Method
cpg	258.95	J/mol×K	513.35	Joback Method
cpg	273.41	J/mol×K	548.76	Joback Method
cpg	287.04	J/mol×K	584.17	Joback Method
cpg	299.87	J/mol×K	619.58	Joback Method

cpg	311.91	J/mol×K	654.99	Joback Method
cpg	323.20	J/mol×K	690.40	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	386.20	K	93.30	NIST Webbook
tbrp	418.50 ± 0.50	K	2.00	NIST Webbook

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=C766938&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume