N,N'-Methylenebis(formamide)

Other names:	Methylenediformamide
	Formamide, N,N'-methylenebis-
	Methylenebisformamide
Inchi:	InChI=1S/C3H6N2O2/c6-2-4-1-5-3-7/h2-3H,1H2,(H,4,6)(H,5,7)
InchiKey:	QPJQPYQZFKFTHG-UHFFFAOYSA-N
Formula:	C3H6N2O2
SMILES:	O=CNCNC=O
Mol. weight [g/mol]:	102.09
CAS:	6921-98-8

Physical Properties

Property code	Value	Unit	Source
gf	-45.88	kJ/mol	Joback Method
hf	-169.47	kJ/mol	Joback Method
hfus	18.30	kJ/mol	Joback Method
hvap	48.58	kJ/mol	Joback Method
log10ws	0.50		Crippen Method
logp	-1.564		Crippen Method
mcvol	76.230	ml/mol	McGowan Method
pc	5636.27	kPa	Joback Method
tb	465.70	K	Joback Method
tc	657.12	K	Joback Method
tf	312.89	K	Joback Method
vc	0.307	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	158.15	J/mol×K	465.70	Joback Method
cpg	164.68	J/mol×K	497.60	Joback Method
cpg	170.87	J/mol×K	529.51	Joback Method
cpg	176.75	J/mol×K	561.41	Joback Method
cpg	182.32	J/mol×K	593.31	Joback Method
cpg	187.58	J/mol×K	625.22	Joback Method

cpg	192.55	J/mol×K	657.12	Joback Method

Sources

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=C6921988&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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