Acetamide, N,N'-ethylenebis(N-nitro-

Other names:	N,N'-Ethylenebis(N-nitroacetamide)
	N,N'-dinitro-N,N'-diacetyl-1,2-diaminoethane
Inchi:	InChI=1S/C6H10N4O6/c1-5(11)7(9(13)14)3-4-8(6(2)12)10(15)16/h3-4H2,1-2H3
InchiKey:	QYYIAMKTNITMRW-UHFFFAOYSA-N
Formula:	C6H10N4O6
SMILES:	CC(=O)N(CCN(C(C)=O)[N+](=O)[O-])[N+](=O)[O-]
Mol. weight [g/mol]:	234.17
CAS:	922-89-4

Physical Properties

Property code	Value	Unit	Source
gf	34.46	kJ/mol	Joback Method
hf	-278.79	kJ/mol	Joback Method
hfus	43.26	kJ/mol	Joback Method
hvap	79.71	kJ/mol	Joback Method
log10ws	-1.17		Crippen Method
logp	-0.933		Crippen Method
mcvol	153.340	ml/mol	McGowan Method
pc	3682.02	kPa	Joback Method
tb	772.98	K	Joback Method
tc	1005.55	K	Joback Method
tf	609.40	K	Joback Method
vc	0.584	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	432.77	J/mol×K	772.98	Joback Method
cpg	441.83	J/mol×K	811.74	Joback Method
cpg	450.08	J/mol×K	850.50	Joback Method
cpg	457.59	J/mol×K	889.26	Joback Method
cpg	464.41	J/mol×K	928.03	Joback Method
cpg	470.60	J/mol×K	966.79	Joback Method
cpg	476.20	J/mol×K	1005.55	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=C922894&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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