Alpha,alpha'-diacetyl-n,n'-diethyl-glutaramide

Inchi: InChI=1S/C13H22N2O4/c1-5-14-12(18)10(8(3)16)7-11(9(4)17)13(19)15-6-2/h10-11H,5-7
InchiKey: SHOUVPPYMUVAON-UHFFFAOYSA-N
Formula: C13H22N2O4
SMILES: CCNC(=O)C(CC(C(C)=O)C(=O)NCC)C(C)=O
Mol. weight [g/mol]: 270.32
CAS: 92107-46-5

Physical Properties

Property code	Value	Unit	Source
gf	-283.20	kJ/mol	Joback Method
hf	-665.59	kJ/mol	Joback Method
hfus	38.97	kJ/mol	Joback Method
hvap	83.61	kJ/mol	Joback Method
log10ws	-1.27		Crippen Method
logp	0.059		Crippen Method
mcvol	220.270	ml/mol	McGowan Method
pc	2119.73	kPa	Joback Method
tb	811.78	K	Joback Method
tc	1013.42	K	Joback Method
tf	511.31	K	Joback Method
vc	0.846	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	661.59	J/mol×K	811.78	Joback Method
cpg	674.13	J/mol×K	845.39	Joback Method
cpg	685.79	J/mol×K	878.99	Joback Method
cpg	696.60	J/mol×K	912.60	Joback Method
cpg	706.59	J/mol×K	946.21	Joback Method
cpg	715.79	J/mol×K	979.81	Joback Method
cpg	724.22	J/mol×K	1013.42	Joback Method

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=C92107465&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume