Acetoxyacetamide, N,N-dinonyl-

Inchi: InChI=1S/C22H43NO3/c1-4-6-8-10-12-14-16-18-23(22(25)20-26-21(3)24)19-17-15-13-11
InchiKey: SJJYQPVWQQCLJG-UHFFFAOYSA-N
Formula: C22H43NO3
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)COC(C)=O
Mol. weight [g/mol]: 369.58

Physical Properties

Property code	Value	Unit	Source
gf	-117.70	kJ/mol	Joback Method
hf	-787.26	kJ/mol	Joback Method
hfus	60.14	kJ/mol	Joback Method
hvap	82.51	kJ/mol	Joback Method
log10ws	-6.24		Crippen Method
logp	5.879		Crippen Method
mcvol	339.830	ml/mol	McGowan Method
pc	962.67	kPa	Joback Method
rinpol	2583.00		NIST Webbook
rinpol	2583.00		NIST Webbook
tb	845.36	K	Joback Method
tc	1035.07	K	Joback Method
tf	492.26	K	Joback Method
vc	1.315	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1103.73	J/mol×K	845.36	Joback Method
cpg	1123.29	J/mol×K	876.98	Joback Method
cpg	1141.71	J/mol×K	908.60	Joback Method
cpg	1159.02	J/mol×K	940.21	Joback Method
cpg	1175.28	J/mol×K	971.83	Joback Method
cpg	1190.51	J/mol×K	1003.45	Joback Method
cpg	1204.77	J/mol×K	1035.07	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=U308299&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume