Acetoxyacetamide, N-decyl-N-methyl-

Inchi: InChI=1S/C15H29NO3/c1-4-5-6-7-8-9-10-11-12-16(3)15(18)13-19-14(2)17/h4-13H2,1-3H
InchiKey: SNYDHKLVMRLVQV-UHFFFAOYSA-N
Formula: C15H29NO3
SMILES: CCCCCCCCCCN(C)C(=O)COC(C)=O
Mol. weight [g/mol]: 271.40

Physical Properties

Property code	Value	Unit	Source
gf	-176.64	kJ/mol	Joback Method
hf	-642.78	kJ/mol	Joback Method
hfus	42.01	kJ/mol	Joback Method
hvap	66.93	kJ/mol	Joback Method
log10ws	-3.31		Crippen Method
logp	3.149		Crippen Method
mcvol	241.200	ml/mol	McGowan Method
pc	1536.66	kPa	Joback Method
rinpol	2015.00		NIST Webbook
rinpol	2015.00		NIST Webbook
tb	685.20	K	Joback Method
tc	859.96	K	Joback Method
tf	413.37	K	Joback Method
vc	0.923	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	688.33	J/mol×K	685.20	Joback Method
cpg	704.89	J/mol×K	714.33	Joback Method
cpg	720.65	J/mol×K	743.45	Joback Method
cpg	735.63	J/mol×K	772.58	Joback Method
cpg	749.83	J/mol×K	801.70	Joback Method
cpg	763.30	J/mol×K	830.83	Joback Method
cpg	776.03	J/mol×K	859.96	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=U308294&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