Sarcosine, N-valeryl-, pentyl ester

Inchi: InChI=1S/C13H25NO3/c1-4-6-8-10-17-13(16)11-14(3)12(15)9-7-5-2/h4-11H2,1-3H3
InchiKey: BIWGOKZWDAKSRH-UHFFFAOYSA-N
Formula: C13H25NO3
SMILES: CCCCCOC(=O)CN(C)C(=O)CCCC
Mol. weight [g/mol]: 243.34

Physical Properties

Property code	Value	Unit	Source
gf	-193.48	kJ/mol	Joback Method
hf	-601.50	kJ/mol	Joback Method
hfus	36.83	kJ/mol	Joback Method
hvap	62.48	kJ/mol	Joback Method
log10ws	-2.47		Crippen Method
logp	2.368		Crippen Method
mcvol	213.020	ml/mol	McGowan Method
pc	1796.98	kPa	Joback Method
rinpol	1809.00		NIST Webbook
rinpol	1809.00		NIST Webbook
tb	639.44	K	Joback Method
tc	814.93	K	Joback Method
tf	390.83	K	Joback Method
vc	0.811	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	579.23	J/mol×K	639.44	Joback Method
cpg	594.88	J/mol×K	668.69	Joback Method
cpg	609.79	J/mol×K	697.94	Joback Method
cpg	623.98	J/mol×K	727.18	Joback Method
cpg	637.47	J/mol×K	756.43	Joback Method
cpg	650.27	J/mol×K	785.68	Joback Method
cpg	662.39	J/mol×K	814.93	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321562&Units=SI
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

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