Sarcosine, N-(3-methylbut-2-enoyl)-, tetradecyl ester

Inchi: InChI=1S/C22H41NO3/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-26-22(25)19-23(4)21(24)1

InchiKey: SWYLROJHAKZJRR-UHFFFAOYSA-N

Formula: C22H41NO3

SMILES: CCCCCCCCCCCCCCOC(=O)CN(C)C(=O)C=C(C)C

Mol. weight [g/mol]: 367.57

Physical Properties

Property code	Value	Unit	Source
gf	-46.03	kJ/mol	Joback Method
hf	-679.83	kJ/mol	Joback Method
hfus	59.03	kJ/mol	Joback Method
hvap	82.55	kJ/mol	Joback Method
log10ws	-6.09		Crippen Method
logp	5.655		Crippen Method
mcvol	335.530	ml/mol	McGowan Method
pc	997.65	kPa	Joback Method
rinpol	2709.00		NIST Webbook
rinpol	2709.00		NIST Webbook
tb	849.40	K	Joback Method
tc	1040.85	K	Joback Method
tf	473.22	K	Joback Method
vc	1.296	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1077.38	J/mol×K	849.40	Joback Method
cpg	1096.37	J/mol×K	881.31	Joback Method
cpg	1114.29	J/mol×K	913.22	Joback Method
cpg	1131.20	J/mol×K	945.12	Joback Method
cpg	1147.14	J/mol×K	977.03	Joback Method
cpg	1162.16	J/mol×K	1008.94	Joback Method
cpg	1176.33	J/mol×K	1040.85	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=U321524&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