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

Inchi: InChI=1S/C26H49NO3/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-30-26(29)23-
InchiKey: GGXUXWAUGWEDIZ-UHFFFAOYSA-N
Formula: C26H49NO3
SMILES: CCCCCCCCCCCCCCCCCCOC(=O)CN(C)C(=O)C=C(C)C
Mol. weight [g/mol]: 423.67

Physical Properties

Property code	Value	Unit	Source
gf	-12.35	kJ/mol	Joback Method
hf	-762.39	kJ/mol	Joback Method
hfus	69.40	kJ/mol	Joback Method
hvap	91.45	kJ/mol	Joback Method
log10ws	-7.77		Crippen Method
logp	7.216		Crippen Method
mcvol	391.890	ml/mol	McGowan Method
pc	793.49	kPa	Joback Method
tb	940.92	K	Joback Method
tc	1155.26	K	Joback Method
tf	518.30	K	Joback Method
vc	1.520	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1329.94	J/mol×K	940.92	Joback Method
cpg	1351.23	J/mol×K	976.64	Joback Method
cpg	1371.16	J/mol×K	1012.37	Joback Method
cpg	1389.84	J/mol×K	1048.09	Joback Method
cpg	1407.35	J/mol×K	1083.82	Joback Method
cpg	1423.76	J/mol×K	1119.54	Joback Method
cpg	1439.17	J/mol×K	1155.26	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321528&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume