Sarcosine, N-(cyclohexylcarbonyl)-, tetradecyl ester

Inchi: InChI=1S/C24H45NO3/c1-3-4-5-6-7-8-9-10-11-12-13-17-20-28-23(26)21-25(2)24(27)22-
InchiKey: RJYTUKQTKSEIEW-UHFFFAOYSA-N
Formula: C24H45NO3
SMILES: CCCCCCCCCCCCCCOC(=O)CN(C)C(=O)C1CCCCC1
Mol. weight [g/mol]: 395.62

Physical Properties

Property code	Value	Unit	Source
gf	-76.41	kJ/mol	Joback Method
hf	-774.22	kJ/mol	Joback Method
hfus	57.16	kJ/mol	Joback Method
hvap	87.39	kJ/mol	Joback Method
log10ws	-6.73		Crippen Method
logp	6.269		Crippen Method
mcvol	357.150	ml/mol	McGowan Method
pc	970.49	kPa	Joback Method
rinpol	3081.00		NIST Webbook
rinpol	3081.00		NIST Webbook
tb	910.67	K	Joback Method
tc	1115.35	K	Joback Method
tf	522.18	K	Joback Method
vc	1.361	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1227.48	J/mol×K	910.67	Joback Method
cpg	1247.61	J/mol×K	944.78	Joback Method
cpg	1266.29	J/mol×K	978.90	Joback Method
cpg	1283.59	J/mol×K	1013.01	Joback Method
cpg	1299.55	J/mol×K	1047.12	Joback Method
cpg	1314.25	J/mol×K	1081.24	Joback Method
cpg	1327.73	J/mol×K	1115.35	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321539&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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