Sarcosine, N-(cyclopentylcarbonyl)-, pentadecyl ester

Inchi: InChI=1S/C24H45NO3/c1-3-4-5-6-7-8-9-10-11-12-13-14-17-20-28-23(26)21-25(2)24(27)
InchiKey: BLWITBKTTXSLRO-UHFFFAOYSA-N
Formula: C24H45NO3
SMILES: CCCCCCCCCCCCCCCCOC(=O)CN(C)C(=O)C1CCCC1
Mol. weight [g/mol]: 395.62

Physical Properties

Property code	Value	Unit	Source
gf	-64.31	kJ/mol	Joback Method
hf	-768.06	kJ/mol	Joback Method
hfus	59.26	kJ/mol	Joback Method
hvap	87.22	kJ/mol	Joback Method
log10ws	-6.73		Crippen Method
logp	6.269		Crippen Method
mcvol	357.150	ml/mol	McGowan Method
pc	955.55	kPa	Joback Method
rinpol	3080.00		NIST Webbook
rinpol	3080.00		NIST Webbook
tb	906.40	K	Joback Method
tc	1109.80	K	Joback Method
tf	525.70	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1222.82	J/mol×K	906.40	Joback Method
cpg	1243.03	J/mol×K	940.30	Joback Method
cpg	1261.89	J/mol×K	974.20	Joback Method
cpg	1279.46	J/mol×K	1008.10	Joback Method
cpg	1295.81	J/mol×K	1042.00	Joback Method
cpg	1311.01	J/mol×K	1075.90	Joback Method
cpg	1325.11	J/mol×K	1109.80	Joback Method

Sources

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=U321344&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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