Sarcosine, N-(cyclohexylcarbonyl)-, dodecyl ester

Inchi: InChI=1S/C22H41NO3/c1-3-4-5-6-7-8-9-10-11-15-18-26-21(24)19-23(2)22(25)20-16-13-
InchiKey: BBIILBOVLYUTTP-UHFFFAOYSA-N
Formula: C22H41NO3
SMILES: CCCCCCCCCCCCOC(=O)CN(C)C(=O)C1CCCCC1
Mol. weight [g/mol]: 367.57

Physical Properties

Property code	Value	Unit	Source
gf	-93.25	kJ/mol	Joback Method
hf	-732.94	kJ/mol	Joback Method
hfus	51.98	kJ/mol	Joback Method
hvap	82.94	kJ/mol	Joback Method
log10ws	-5.89		Crippen Method
logp	5.489		Crippen Method
mcvol	328.970	ml/mol	McGowan Method
pc	1097.90	kPa	Joback Method
rinpol	2789.00		NIST Webbook
tb	864.91	K	Joback Method
tc	1062.92	K	Joback Method
tf	499.64	K	Joback Method
vc	1.248	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1101.56	J/mol×K	864.91	Joback Method
cpg	1121.27	J/mol×K	897.91	Joback Method
cpg	1139.63	J/mol×K	930.91	Joback Method
cpg	1156.71	J/mol×K	963.91	Joback Method
cpg	1172.55	J/mol×K	996.91	Joback Method
cpg	1187.20	J/mol×K	1029.91	Joback Method
cpg	1200.71	J/mol×K	1062.92	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=U321538&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