Sarcosine, N-(cyclohexylcarbonyl)-, decyl ester

Inchi: InChI=1S/C20H37NO3/c1-3-4-5-6-7-8-9-13-16-24-19(22)17-21(2)20(23)18-14-11-10-12-
InchiKey: IRLVLWDYOCMIKB-UHFFFAOYSA-N
Formula: C20H37NO3
SMILES: CCCCCCCCCCOC(=O)CN(C)C(=O)C1CCCCC1
Mol. weight [g/mol]: 339.51

Physical Properties

Property code	Value	Unit	Source
gf	-110.09	kJ/mol	Joback Method
hf	-691.66	kJ/mol	Joback Method
hfus	46.80	kJ/mol	Joback Method
hvap	78.49	kJ/mol	Joback Method
log10ws	-5.06		Crippen Method
logp	4.709		Crippen Method
mcvol	300.790	ml/mol	McGowan Method
pc	1252.15	kPa	Joback Method
rinpol	2563.00		NIST Webbook
rinpol	2563.00		NIST Webbook
tb	819.15	K	Joback Method
tc	1013.70	K	Joback Method
tf	477.10	K	Joback Method
vc	1.137	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	978.05	J/mol×K	819.15	Joback Method
cpg	997.43	J/mol×K	851.57	Joback Method
cpg	1015.56	J/mol×K	884.00	Joback Method
cpg	1032.48	J/mol×K	916.42	Joback Method
cpg	1048.23	J/mol×K	948.85	Joback Method
cpg	1062.85	J/mol×K	981.27	Joback Method
cpg	1076.37	J/mol×K	1013.70	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321536&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume