Sarcosine, N-(cyclopentylcarbonyl)-, ethyl ester

Inchi: InChI=1S/C11H19NO3/c1-3-15-10(13)8-12(2)11(14)9-6-4-5-7-9/h9H,3-8H2,1-2H3
InchiKey: MSDMWTVBFGLWDM-UHFFFAOYSA-N
Formula: C11H19NO3
SMILES: CCOC(=O)CN(C)C(=O)C1CCCC1
Mol. weight [g/mol]: 213.27

Physical Properties

Property code	Value	Unit	Source
gf	-173.77	kJ/mol	Joback Method
hf	-499.74	kJ/mol	Joback Method
hfus	25.59	kJ/mol	Joback Method
hvap	58.28	kJ/mol	Joback Method
log10ws	-1.29		Crippen Method
logp	1.198		Crippen Method
mcvol	173.980	ml/mol	McGowan Method
pc	2532.82	kPa	Joback Method
rinpol	1659.00		NIST Webbook
tb	608.96	K	Joback Method
tc	809.80	K	Joback Method
tf	379.19	K	Joback Method
vc	0.640	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	464.59	J/mol×K	608.96	Joback Method
cpg	481.22	J/mol×K	642.43	Joback Method
cpg	496.89	J/mol×K	675.91	Joback Method
cpg	511.64	J/mol×K	709.38	Joback Method
cpg	525.48	J/mol×K	742.86	Joback Method
cpg	538.44	J/mol×K	776.33	Joback Method
cpg	550.56	J/mol×K	809.80	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=U321335&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