N-Acryloylsarcosine methyl ester

Inchi: InChI=1S/C7H11NO3/c1-4-6(9)8(2)5-7(10)11-3/h4H,1,5H2,2-3H3
InchiKey: ZCQGVFNHUATAJY-UHFFFAOYSA-N
Formula: C7H11NO3
SMILES: C=CC(=O)N(C)CC(=O)OC
Mol. weight [g/mol]: 157.17
CAS: 72065-23-7

Physical Properties

Property code	Value	Unit	Source
gf	-156.16	kJ/mol	Joback Method
hf	-352.23	kJ/mol	Joback Method
hfus	20.01	kJ/mol	Joback Method
hvap	48.45	kJ/mol	Joback Method
log10ws	0.19		Crippen Method
logp	-0.196		Crippen Method
mcvol	124.180	ml/mol	McGowan Method
pc	3299.15	kPa	Joback Method
tb	498.84	K	Joback Method
tc	687.20	K	Joback Method
tf	321.45	K	Joback Method
vc	0.457	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	270.15	J/mol×K	498.84	Joback Method
cpg	280.90	J/mol×K	530.23	Joback Method
cpg	291.14	J/mol×K	561.63	Joback Method
cpg	300.88	J/mol×K	593.02	Joback Method
cpg	310.13	J/mol×K	624.41	Joback Method
cpg	318.90	J/mol×K	655.81	Joback Method
cpg	327.21	J/mol×K	687.20	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=C72065237&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume