5-Ethyl-5-methoxazolidine-2,4-dione

Inchi: InChI=1S/C6H9NO3/c1-3-6(2)4(8)7-5(9)10-6/h3H2,1-2H3,(H,7,8,9)
InchiKey: MGHNWMRNFGYJKE-UHFFFAOYSA-N
Formula: C6H9NO3
SMILES: CCC1(C)OC(=O)NC1=O
Mol. weight [g/mol]: 143.14
CAS: 52387-52-7

Physical Properties

Property code	Value	Unit	Source
gf	-212.89	kJ/mol	Joback Method
hf	-461.04	kJ/mol	Joback Method
hfus	15.52	kJ/mol	Joback Method
hvap	47.82	kJ/mol	Joback Method
log10ws	-1.15		Crippen Method
logp	0.422		Crippen Method
mcvol	103.530	ml/mol	McGowan Method
pc	4546.92	kPa	Joback Method
tb	563.34	K	Joback Method
tc	812.69	K	Joback Method
tf	460.22	K	Joback Method
vc	0.383	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	253.39	J/mol×K	563.34	Joback Method
cpg	266.28	J/mol×K	604.90	Joback Method
cpg	278.61	J/mol×K	646.46	Joback Method
cpg	290.42	J/mol×K	688.01	Joback Method
cpg	301.78	J/mol×K	729.57	Joback Method
cpg	312.75	J/mol×K	771.13	Joback Method
cpg	323.37	J/mol×K	812.69	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C52387527&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume