Cyclopentane-1-carboxylic acid, 1-ethyl, methyl ester

Other names: Cyclopentanecarboxylic acid, 1-ethyl, methyl ester
Inchi: InChI=1S/C9H16O2/c1-3-9(8(10)11-2)6-4-5-7-9/h3-7H2,1-2H3
InchiKey: ADUGONOVZSGHBC-UHFFFAOYSA-N
Formula: C9H16O2
SMILES: CCC1(C(=O)OC)CCCC1
Mol. weight [g/mol]: 156.22

Physical Properties

Property code	Value	Unit	Source
gf	-177.96	kJ/mol	Joback Method
hf	-398.17	kJ/mol	Joback Method
hfus	9.49	kJ/mol	Joback Method
hvap	43.89	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	2.130		Crippen Method
mcvol	134.250	ml/mol	McGowan Method
pc	3049.04	kPa	Joback Method
rinpol	1017.00		NIST Webbook
rinpol	1017.00		NIST Webbook
tb	497.13	K	Joback Method
tc	706.51	K	Joback Method
tf	298.15	K	Joback Method
vc	0.502	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	308.52	J/mol×K	497.13	Joback Method
cpg	324.57	J/mol×K	532.03	Joback Method
cpg	339.62	J/mol×K	566.92	Joback Method
cpg	353.78	J/mol×K	601.82	Joback Method
cpg	367.14	J/mol×K	636.72	Joback Method
cpg	379.79	J/mol×K	671.61	Joback Method
cpg	391.83	J/mol×K	706.51	Joback Method

Sources

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=R164&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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