Cyclopentanecarboxylic acid, ethyl ester

Inchi: InChI=1S/C8H14O2/c1-2-10-8(9)7-5-3-4-6-7/h7H,2-6H2,1H3
InchiKey: UWSJCCUODNDXOT-UHFFFAOYSA-N
Formula: C8H14O2
SMILES: CCOC(=O)C1CCCC1
Mol. weight [g/mol]: 142.20

Physical Properties

Property code	Value	Unit	Source
gf	-180.89	kJ/mol	Joback Method
hf	-392.77	kJ/mol	Joback Method
hfus	13.20	kJ/mol	Joback Method
hvap	42.81	kJ/mol	Joback Method
log10ws	-1.69		Crippen Method
logp	1.740		Crippen Method
mcvol	120.160	ml/mol	McGowan Method
pc	3228.31	kPa	Joback Method
rinpol	1036.00		NIST Webbook
tb	474.01	K	Joback Method
tc	677.64	K	Joback Method
tf	262.98	K	Joback Method
vc	0.449	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.68	J/mol×K	474.01	Joback Method
cpg	332.13	J/mol×K	643.70	Joback Method
cpg	319.85	J/mol×K	609.76	Joback Method
cpg	306.88	J/mol×K	575.83	Joback Method
cpg	293.21	J/mol×K	541.89	Joback Method
cpg	278.81	J/mol×K	507.95	Joback Method
cpg	343.74	J/mol×K	677.64	Joback Method
dvisc	0.0003332	Pa×s	474.01	Joback Method
dvisc	0.0004182	Pa×s	438.84	Joback Method

dvisc	0.0005459	Pa×s	403.67	Joback Method
dvisc	0.0007500	Pa×s	368.50	Joback Method
dvisc	0.0011016	Pa×s	333.32	Joback Method
dvisc	0.0017719	Pa×s	298.15	Joback Method
dvisc	0.0032364	Pa×s	262.98	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=U375864&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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