2-Cyclopentene-1-carboxylic acid

Inchi: InChI=1S/C6H8O2/c7-6(8)5-3-1-2-4-5/h1,3,5H,2,4H2,(H,7,8)
InchiKey: MOMBAXHNIPLMSI-UHFFFAOYSA-N
Formula: C6H8O2
SMILES: O=C(O)C1C=CCC1
Mol. weight [g/mol]: 112.13
CAS: 2348-89-2

Physical Properties

Property code	Value	Unit	Source
gf	-199.59	kJ/mol	Joback Method
hf	-313.72	kJ/mol	Joback Method
hfus	12.14	kJ/mol	Joback Method
hvap	52.92	kJ/mol	Joback Method
log10ws	-0.94		Crippen Method
logp	1.037		Crippen Method
mcvol	87.680	ml/mol	McGowan Method
pc	4938.44	kPa	Joback Method
ripol	1642.00		NIST Webbook
tb	497.17	K	Joback Method
tc	697.05	K	Joback Method
tf	279.79	K	Joback Method
vc	0.324	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	190.10	J/mol×K	497.17	Joback Method
cpg	234.08	J/mol×K	663.73	Joback Method
cpg	226.35	J/mol×K	630.42	Joback Method
cpg	218.12	J/mol×K	597.11	Joback Method
cpg	209.35	J/mol×K	563.80	Joback Method
cpg	200.02	J/mol×K	530.48	Joback Method
cpg	241.31	J/mol×K	697.05	Joback Method
dvisc	0.0002496	Pa×s	497.17	Joback Method

dvisc	0.0003799	Pa×s	460.94	Joback Method
dvisc	0.0006212	Pa×s	424.71	Joback Method
dvisc	0.0011131	Pa×s	388.48	Joback Method
dvisc	0.0022488	Pa×s	352.25	Joback Method
dvisc	0.0053385	Pa×s	316.02	Joback Method
dvisc	0.0158532	Pa×s	279.79	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2348892&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
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume