Cyclopentenyl radical

Inchi: InChI=1S/C5H7/c1-2-4-5-3-1/h1-3H,4-5H2
InchiKey: MNLVCBKWEVXHGE-UHFFFAOYSA-N
Formula: C5H7
SMILES: [CH]1C=CCC1
Mol. weight [g/mol]: 67.11
CAS: 10577-65-8

Physical Properties

Property code	Value	Unit	Source
gf	110.11	kJ/mol	Joback Method
hf	27.54	kJ/mol	Joback Method
hfus	5.54	kJ/mol	Joback Method
hvap	27.13	kJ/mol	Joback Method
ie	7.00	eV	NIST Webbook
log10ws	-1.27		Crippen Method
logp	1.541		Crippen Method
mcvol	64.000	ml/mol	McGowan Method
pc	4835.95	kPa	Joback Method
tb	327.54	K	Joback Method
tc	521.11	K	Joback Method
tf	174.14	K	Joback Method
vc	0.234	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	86.49	J/mol×K	327.54	Joback Method
cpg	97.35	J/mol×K	359.80	Joback Method
cpg	107.48	J/mol×K	392.06	Joback Method
cpg	116.91	J/mol×K	424.33	Joback Method
cpg	125.69	J/mol×K	456.59	Joback Method
cpg	133.85	J/mol×K	488.85	Joback Method
cpg	141.44	J/mol×K	521.11	Joback Method
dvisc	0.0003606	Pa×s	174.14	Joback Method

dvisc	0.0003248	Pa×s	199.71	Joback Method
dvisc	0.0002996	Pa×s	225.27	Joback Method
dvisc	0.0002809	Pa×s	250.84	Joback Method
dvisc	0.0002665	Pa×s	276.41	Joback Method
dvisc	0.0002552	Pa×s	301.97	Joback Method
dvisc	0.0002460	Pa×s	327.54	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C10577658&Units=SI

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
ie:	Ionization energy
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