1,3-Cyclopentadiene, 1-(1-methylethyl)

Inchi: InChI=1S/C8H12/c1-7(2)8-5-3-4-6-8/h3-5,7H,6H2,1-2H3
InchiKey: MWQKURVBJZAOSC-UHFFFAOYSA-N
Formula: C8H12
SMILES: CC(C)C1=CC=CC1
Mol. weight [g/mol]: 108.18

Physical Properties

Property code	Value	Unit	Source
gf	108.59	kJ/mol	Joback Method
hf	-28.82	kJ/mol	Joback Method
hfus	7.87	kJ/mol	Joback Method
hvap	34.83	kJ/mol	Joback Method
log10ws	-2.53		Crippen Method
logp	2.529		Crippen Method
mcvol	104.120	ml/mol	McGowan Method
pc	3427.87	kPa	Joback Method
rinpol	788.00		NIST Webbook
tb	405.25	K	Joback Method
tc	608.95	K	Joback Method
tf	194.10	K	Joback Method
vc	0.392	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	189.96	J/mol×K	405.25	Joback Method
cpg	203.61	J/mol×K	439.20	Joback Method
cpg	216.51	J/mol×K	473.15	Joback Method
cpg	228.69	J/mol×K	507.10	Joback Method
cpg	240.17	J/mol×K	541.05	Joback Method
cpg	250.99	J/mol×K	575.00	Joback Method
cpg	261.19	J/mol×K	608.95	Joback Method
dvisc	0.0040067	Pa×s	194.10	Joback Method
dvisc	0.0017923	Pa×s	229.29	Joback Method

dvisc	0.0009932	Pa×s	264.48	Joback Method
dvisc	0.0006322	Pa×s	299.68	Joback Method
dvisc	0.0004425	Pa×s	334.87	Joback Method
dvisc	0.0003315	Pa×s	370.06	Joback Method
dvisc	0.0002611	Pa×s	405.25	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=R40671&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
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