1,3-Cyclopentadiene, 5-ethyl

Inchi: InChI=1S/C7H10/c1-2-7-5-3-4-6-7/h3-7H,2H2,1H3
InchiKey: CLRIMWMVEVYXAK-UHFFFAOYSA-N
Formula: C7H10
SMILES: CCC1C=CC=C1
Mol. weight [g/mol]: 94.15

Physical Properties

Property code	Value	Unit	Source
gf	104.53	kJ/mol	Joback Method
hf	-11.77	kJ/mol	Joback Method
hfus	10.26	kJ/mol	Joback Method
hvap	32.02	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	2.139		Crippen Method
mcvol	90.030	ml/mol	McGowan Method
pc	3727.11	kPa	Joback Method
rinpol	748.00		NIST Webbook
ripol	966.70		NIST Webbook
tb	373.16	K	Joback Method
tc	571.29	K	Joback Method
tf	181.07	K	Joback Method
vc	0.341	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	150.86	J/mol×K	373.16	Joback Method
cpg	163.59	J/mol×K	406.18	Joback Method
cpg	175.63	J/mol×K	439.20	Joback Method
cpg	187.03	J/mol×K	472.23	Joback Method
cpg	197.79	J/mol×K	505.25	Joback Method
cpg	207.95	J/mol×K	538.27	Joback Method
cpg	217.53	J/mol×K	571.29	Joback Method
dvisc	0.0017870	Pa×s	181.07	Joback Method

dvisc	0.0010089	Pa×s	213.08	Joback Method
dvisc	0.0006614	Pa×s	245.10	Joback Method
dvisc	0.0004780	Pa×s	277.12	Joback Method
dvisc	0.0003695	Pa×s	309.13	Joback Method
dvisc	0.0002998	Pa×s	341.14	Joback Method
dvisc	0.0002521	Pa×s	373.16	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=R40902&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume