1,3-Cyclopentadiene, 1-propyl

Inchi: InChI=1S/C8H12/c1-2-5-8-6-3-4-7-8/h3-4,6H,2,5,7H2,1H3
InchiKey: RZPAXISDLOEXPI-UHFFFAOYSA-N
Formula: C8H12
SMILES: CCCC1=CC=CC1
Mol. weight [g/mol]: 108.18

Physical Properties

Property code	Value	Unit	Source
gf	111.03	kJ/mol	Joback Method
hf	-23.54	kJ/mol	Joback Method
hfus	11.39	kJ/mol	Joback Method
hvap	35.21	kJ/mol	Joback Method
log10ws	-2.77		Crippen Method
logp	2.673		Crippen Method
mcvol	104.120	ml/mol	McGowan Method
pc	3395.98	kPa	Joback Method
rinpol	816.00		NIST Webbook
ripol	1020.20		NIST Webbook
tb	405.69	K	Joback Method
tc	604.50	K	Joback Method
tf	209.10	K	Joback Method
vc	0.398	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	189.98	J/mol×K	405.69	Joback Method
cpg	203.21	J/mol×K	438.83	Joback Method
cpg	215.72	J/mol×K	471.96	Joback Method
cpg	227.56	J/mol×K	505.10	Joback Method
cpg	238.74	J/mol×K	538.23	Joback Method
cpg	249.30	J/mol×K	571.37	Joback Method
cpg	259.27	J/mol×K	604.50	Joback Method
dvisc	0.0026250	Pa×s	209.10	Joback Method

dvisc	0.0013917	Pa×s	241.87	Joback Method
dvisc	0.0008584	Pa×s	274.63	Joback Method
dvisc	0.0005869	Pa×s	307.39	Joback Method
dvisc	0.0004318	Pa×s	340.16	Joback Method
dvisc	0.0003353	Pa×s	372.92	Joback Method
dvisc	0.0002712	Pa×s	405.69	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=R40774&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume