1,3-Cyclopentadiene, 1-butyl

Inchi: InChI=1S/C9H14/c1-2-3-6-9-7-4-5-8-9/h4-5,7H,2-3,6,8H2,1H3
InchiKey: FTFYDDRPCCMKBT-UHFFFAOYSA-N
Formula: C9H14
SMILES: CCCCC1=CC=CC1
Mol. weight [g/mol]: 122.21

Physical Properties

Property code	Value	Unit	Source
gf	119.45	kJ/mol	Joback Method
hf	-44.18	kJ/mol	Joback Method
hfus	13.98	kJ/mol	Joback Method
hvap	37.44	kJ/mol	Joback Method
log10ws	-3.19		Crippen Method
logp	3.063		Crippen Method
mcvol	118.210	ml/mol	McGowan Method
pc	3045.68	kPa	Joback Method
rinpol	916.00		NIST Webbook
rinpol	916.00		NIST Webbook
ripol	1118.10		NIST Webbook
tb	428.57	K	Joback Method
tc	625.48	K	Joback Method
tf	220.37	K	Joback Method
vc	0.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.94	J/mol×K	428.57	Joback Method
cpg	294.54	J/mol×K	592.66	Joback Method
cpg	283.01	J/mol×K	559.85	Joback Method
cpg	270.82	J/mol×K	527.03	Joback Method
cpg	257.93	J/mol×K	494.21	Joback Method
cpg	244.32	J/mol×K	461.39	Joback Method
cpg	305.43	J/mol×K	625.48	Joback Method

dvisc	0.0002749	Pa×s	428.57	Joback Method
dvisc	0.0003428	Pa×s	393.87	Joback Method
dvisc	0.0004461	Pa×s	359.17	Joback Method
dvisc	0.0006142	Pa×s	324.47	Joback Method
dvisc	0.0009129	Pa×s	289.77	Joback Method
dvisc	0.0015112	Pa×s	255.07	Joback Method
dvisc	0.0029321	Pa×s	220.37	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=R40699&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

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