Cyclopentene, 1-butyl-5-methyl

Inchi: InChI=1S/C10H18/c1-3-4-7-10-8-5-6-9(10)2/h8-9H,3-7H2,1-2H3
InchiKey: IBMLZGHEDQKMHF-UHFFFAOYSA-N
Formula: C10H18
SMILES: CCCCC1=CCCC1C
Mol. weight [g/mol]: 138.25

Physical Properties

Property code	Value	Unit	Source
gf	90.20	kJ/mol	Joback Method
hf	-142.94	kJ/mol	Joback Method
hfus	16.42	kJ/mol	Joback Method
hvap	39.06	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2558.51	kPa	Joback Method
rinpol	890.00		NIST Webbook
tb	447.62	K	Joback Method
tc	640.17	K	Joback Method
tf	226.64	K	Joback Method
vc	0.522	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	287.18	J/mol×K	447.62	Joback Method
cpg	363.75	J/mol×K	608.07	Joback Method
cpg	349.93	J/mol×K	575.98	Joback Method
cpg	335.38	J/mol×K	543.89	Joback Method
cpg	320.09	J/mol×K	511.80	Joback Method
cpg	304.03	J/mol×K	479.71	Joback Method
cpg	376.88	J/mol×K	640.17	Joback Method
dvisc	0.0002821	Pa×s	447.62	Joback Method
dvisc	0.0003457	Pa×s	410.79	Joback Method

dvisc	0.0004411	Pa×s	373.96	Joback Method
dvisc	0.0005935	Pa×s	337.13	Joback Method
dvisc	0.0008589	Pa×s	300.30	Joback Method
dvisc	0.0013782	Pa×s	263.47	Joback Method
dvisc	0.0025789	Pa×s	226.64	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R10799&Units=SI
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

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

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