

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
rinsol	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	m ³ /kmol	Joback Method

Temperature Dependent Properties

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

dvisc	0.0004411	Paxs	373.96	Joback Method
dvisc	0.0005935	Paxs	337.13	Joback Method
dvisc	0.0008589	Paxs	300.30	Joback Method
dvisc	0.0013782	Paxs	263.47	Joback Method
dvisc	0.0025789	Paxs	226.64	Joback Method

Sources

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=R10799&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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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