

Cyclopentene, 1-butyl-2-methyl

Inchi:	InChI=1S/C10H18/c1-3-4-7-10-8-5-6-9(10)2/h3-8H2,1-2H3
InchiKey:	YJCCJFPRGKWFQD-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	CCCCC1=C(C)CCC1
Mol. weight [g/mol]:	138.25

Physical Properties

Property code	Value	Unit	Source
gf	88.28	kJ/mol	Joback Method
hf	-134.07	kJ/mol	Joback Method
hfus	14.96	kJ/mol	Joback Method
hvap	40.04	kJ/mol	Joback Method
log10ws	-3.76		Crippen Method
logp	3.677		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2605.74	kPa	Joback Method
rinpol	1007.00		NIST Webbook
tb	457.27	K	Joback Method
tc	651.49	K	Joback Method
tf	243.40	K	Joback Method
vc	0.523	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.35	J/molxK	457.27	Joback Method
cpg	304.47	J/molxK	489.64	Joback Method
cpg	319.81	J/molxK	522.01	Joback Method
cpg	334.42	J/molxK	554.38	Joback Method
cpg	348.31	J/molxK	586.75	Joback Method
cpg	361.52	J/molxK	619.12	Joback Method
cpg	374.07	J/molxK	651.49	Joback Method
dvisc	0.0027476	Paxs	243.40	Joback Method
dvisc	0.0014542	Paxs	279.05	Joback Method

dvisc	0.0008890	Paxs	314.69	Joback Method
dvisc	0.0006007	Paxs	350.33	Joback Method
dvisc	0.0004364	Paxs	385.98	Joback Method
dvisc	0.0003346	Paxs	421.62	Joback Method
dvisc	0.0002674	Paxs	457.27	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=R143490&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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