

Cyclopentane, 1-butyl-2-methyl

Inchi:	InChI=1S/C10H20/c1-3-4-7-10-8-5-6-9(10)2/h9-10H,3-8H2,1-2H3
InchiKey:	CBGQSQYVGVKUCW-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	CCCCC1CCCC1C
Mol. weight [g/mol]:	140.27

Physical Properties

Property code	Value	Unit	Source
gf	62.16	kJ/mol	Joback Method
hf	-209.59	kJ/mol	Joback Method
hfus	16.66	kJ/mol	Joback Method
hvap	37.80	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.613		Crippen Method
mvol	140.900	ml/mol	McGowan Method
pc	2424.27	kPa	Joback Method
rinpol	1007.00		NIST Webbook
tb	438.81	K	Joback Method
tc	627.75	K	Joback Method
tf	209.12	K	Joback Method
vc	0.535	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.00	J/molxK	438.81	Joback Method
cpg	385.42	J/molxK	596.26	Joback Method
cpg	369.93	J/molxK	564.77	Joback Method
cpg	353.67	J/molxK	533.28	Joback Method
cpg	336.60	J/molxK	501.79	Joback Method
cpg	318.72	J/molxK	470.30	Joback Method
cpg	400.16	J/molxK	627.75	Joback Method
dvisc	0.0003036	Paxs	438.81	Joback Method
dvisc	0.0003706	Paxs	400.53	Joback Method

dvisc	0.0004719	Paxs	362.25	Joback Method
dvisc	0.0006360	Paxs	323.97	Joback Method
dvisc	0.0009287	Paxs	285.68	Joback Method
dvisc	0.0015247	Paxs	247.40	Joback Method
dvisc	0.0030012	Paxs	209.12	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R10593&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
mccvol:	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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