

Cyclopentene, 1-(2-methylbutyl)-

Inchi:	InChI=1S/C10H18/c1-3-9(2)8-10-6-4-5-7-10/h6,9H,3-5,7-8H2,1-2H3
InchiKey:	MYDUZRJIUKNRNR-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	CCC(C)CC1=CCCC1
Mol. weight [g/mol]:	138.25
CAS:	53366-53-3

Physical Properties

Property code	Value	Unit	Source
gf	95.47	kJ/mol	Joback Method
hf	-127.88	kJ/mol	Joback Method
hfus	11.83	kJ/mol	Joback Method
hvap	38.99	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.533		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2668.02	kPa	Joback Method
rinpol	993.00		NIST Webbook
rinpol	997.00		NIST Webbook
rinpol	993.00		NIST Webbook
rinpol	997.00		NIST Webbook
tb	451.85	K	Joback Method
tc	649.23	K	Joback Method
tf	215.88	K	Joback Method
vc	0.517	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	287.06	J/molxK	451.85	Joback Method
cpg	304.08	J/molxK	484.75	Joback Method
cpg	320.22	J/molxK	517.64	Joback Method
cpg	335.53	J/molxK	550.54	Joback Method
cpg	350.04	J/molxK	583.44	Joback Method

cpg	363.77	J/molxK	616.33	Joback Method
cpg	376.77	J/molxK	649.23	Joback Method
dvisc	0.0062360	Paxs	215.88	Joback Method
dvisc	0.0024629	Paxs	255.21	Joback Method
dvisc	0.0012466	Paxs	294.54	Joback Method
dvisc	0.0007408	Paxs	333.86	Joback Method
dvisc	0.0004912	Paxs	373.19	Joback Method
dvisc	0.0003523	Paxs	412.52	Joback Method
dvisc	0.0002677	Paxs	451.85	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=C53366533&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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