Cyclopentane, 1-isobutylidene-3-methyl-

Other names: Cyclopentane, 1-methyl-3-(2-methylpropylidene)
Inchi: InChI=1S/C10H18/c1-8(2)6-10-5-4-9(3)7-10/h6,8-9H,4-5,7H2,1-3H3/b10-6+
InchiKey: XNTSNEVQPKOOTJ-UXBLZVDNSA-N
Formula: C10H18
SMILES: CC(C)C=C1CCC(C)C1
Mol. weight [g/mol]: 138.25

Physical Properties

Property code	Value	Unit	Source
gf	112.89	kJ/mol	Joback Method
hf	-118.50	kJ/mol	Joback Method
hfus	12.39	kJ/mol	Joback Method
hvap	38.51	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.389		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2600.43	kPa	Joback Method
rinpol	948.00		NIST Webbook
rinpol	950.00		NIST Webbook
rinpol	944.00		NIST Webbook
rinpol	947.00		NIST Webbook
rinpol	944.00		NIST Webbook
rinpol	944.00		NIST Webbook
rinpol	947.00		NIST Webbook
rinpol	950.00		NIST Webbook
tb	449.68	K	Joback Method
tc	650.57	K	Joback Method
tf	208.72	K	Joback Method
vc	0.513	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.89	J/mol×K	449.68	Joback Method

cpg	304.72	J/mol×K	483.16	Joback Method
cpg	321.65	J/mol×K	516.64	Joback Method
cpg	337.70	J/mol×K	550.13	Joback Method
cpg	352.91	J/mol×K	583.61	Joback Method
cpg	367.31	J/mol×K	617.09	Joback Method
cpg	380.94	J/mol×K	650.57	Joback Method
dvisc	0.0041079	Pa×s	208.72	Joback Method
dvisc	0.0017690	Pa×s	248.88	Joback Method
dvisc	0.0009628	Pa×s	289.04	Joback Method
dvisc	0.0006078	Pa×s	329.20	Joback Method
dvisc	0.0004241	Pa×s	369.36	Joback Method
dvisc	0.0003175	Pa×s	409.52	Joback Method
dvisc	0.0002504	Pa×s	449.68	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=U150621&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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