Cyclohexene, 4-methyl-1-(1-methylethenyl)-

Other names:	p-Mentha-3,8-diene
	3,8-p-Menthadiene
	1-Isopropenyl-4-methyl-cyclohexene
	4-Methyl-1-(1-methylethenyl)-cyclohexene
Inchi:	InChI=1S/C10H16/c1-8(2)10-6-4-9(3)5-7-10/h6,9H,1,4-5,7H2,2-3H3
InchiKey:	AJSJXSBFZDIRIS-UHFFFAOYSA-N
Formula:	C10H16
SMILES:	C=C(C)C1=CCC(C)CC1
Mol. weight [g/mol]:	136.23
CAS:	586-67-4

Physical Properties

Property code	Value	Unit	Source
gf	157.39	kJ/mol	Joback Method
hf	-33.46	kJ/mol	Joback Method
hfus	11.73	kJ/mol	Joback Method
hvap	38.65	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.309		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2755.56	kPa	Joback Method
rinpol	1070.00		NIST Webbook
rinpol	1073.50		NIST Webbook
rinpol	1076.00		NIST Webbook
rinpol	1071.00		NIST Webbook
rinpol	1073.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1060.00		NIST Webbook
rinpol	1092.00		NIST Webbook
rinpol	1092.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1076.00		NIST Webbook
rinpol	1073.50		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1071.00		NIST Webbook
ripol	1270.00		NIST Webbook
ripol	1271.00		NIST Webbook

ripol	1271.00		NIST Webbook
ripol	1270.00		NIST Webbook
tb	458.00 ± 4.00	K	NIST Webbook
tc	657.16	K	Joback Method
tf	207.40	K	Joback Method
vc	0.496	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.80	J/mol×K	448.45	Joback Method
cpg	287.42	J/mol×K	483.23	Joback Method
cpg	304.13	J/mol×K	518.02	Joback Method
cpg	319.94	J/mol×K	552.80	Joback Method
cpg	334.90	J/mol×K	587.59	Joback Method
cpg	349.03	J/mol×K	622.37	Joback Method
cpg	362.36	J/mol×K	657.16	Joback Method

Sources

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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C586674&Units=SI

Legend

cpg: Ideal gas heat capacity
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume