Cyclohexene, 4-methylene-1-(1-methylethyl)-

Other names:	p-Mentha-1(7),3-diene
	«beta»-Terpinen
	«beta»-Terpinene
	Beta terpinene
	Cyclohexene, 4-methylene-1-isopropyl
Inchi:	InChI=1S/C10H16/c1-8(2)10-6-4-9(3)5-7-10/h6,8H,3-5,7H2,1-2H3
InchiKey:	SCWPFSIZUZUCCE-UHFFFAOYSA-N
Formula:	C10H16
SMILES:	C=C1CC=C(C(C)C)CC1
Mol. weight [g/mol]:	136.23
CAS:	99-84-3

Physical Properties

Property code	Value	Unit	Source
gf	136.45	kJ/mol	Joback Method
hf	-49.80	kJ/mol	Joback Method
hfus	8.57	kJ/mol	Joback Method
hvap	39.32	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.309		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2793.56	kPa	Joback Method
rinpol	988.00		NIST Webbook
rinpol	1056.00		NIST Webbook
rinpol	1020.00		NIST Webbook
rinpol	1019.00		NIST Webbook
rinpol	1051.00		NIST Webbook
rinpol	1036.00		NIST Webbook
rinpol	1049.00		NIST Webbook
ripol	1232.00		NIST Webbook
ripol	1254.00		NIST Webbook
ripol	1218.00		NIST Webbook
ripol	1206.00		NIST Webbook
ripol	1177.00		NIST Webbook
ripol	1206.00		NIST Webbook
tb	455.28	K	Joback Method
tc	662.37	K	Joback Method

tf	226.04	K	Joback Method
vc	0.493	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.38	J/mol×K	455.28	Joback Method
cpg	287.89	J/mol×K	489.79	Joback Method
cpg	303.57	J/mol×K	524.31	Joback Method
cpg	318.45	J/mol×K	558.82	Joback Method
cpg	332.55	J/mol×K	593.34	Joback Method
cpg	345.88	J/mol×K	627.85	Joback Method
cpg	358.49	J/mol×K	662.37	Joback Method
dvisc	0.0048809	Pa×s	226.04	Joback Method
dvisc	0.0020419	Pa×s	264.25	Joback Method
dvisc	0.0010646	Pa×s	302.45	Joback Method
dvisc	0.0006424	Pa×s	340.66	Joback Method
dvisc	0.0004292	Pa×s	378.87	Joback Method
dvisc	0.0003087	Pa×s	417.07	Joback Method
dvisc	0.0002347	Pa×s	455.28	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C99843&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
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