1,2-Cyclohexanediol, 1-methyl-4-(1-methylethenyl)-

Other names:	1-Methyl-4-(1-methylethenyl)-1,2-cyclohexanediol
	8-p-Menthadien-1,2-diol
	8-p-Menthen-1,2-diol
	Limonene-1,2-diol
	Limonene glycol
	limonene-diol
	Limonen-1,2-diol
	p-Menth-8-en-1,2-diol
	1-methyl-4-(1-methylvinyl)cyclohexane-1,2-diol
Inchi:	InChI=1S/C10H18O2/c1-7(2)8-4-5-10(3,12)9(11)6-8/h8-9,11-12H,1,4-6H2,2-3H3
InchiKey:	WKZWTZTZWGWEGE-UHFFFAOYSA-N
Formula:	C10H18O2
SMILES:	C=C(C)C1CCC(C)(O)C(O)C1
Mol. weight [g/mol]:	170.25
CAS:	1946-00-5

Physical Properties

Property code	Value	Unit	Source
gf	-157.49	kJ/mol	Joback Method
hf	-409.67	kJ/mol	Joback Method
hfus	14.92	kJ/mol	Joback Method
hvap	69.28	kJ/mol	Joback Method
log10ws	-2.27		Crippen Method
logp	1.475		Crippen Method
mcvol	148.340	ml/mol	McGowan Method
pc	3217.33	kPa	Joback Method
rinpol	1342.90		NIST Webbook
rinpol	1342.90		NIST Webbook
rinpol	1321.00		NIST Webbook
rinpol	1321.00		NIST Webbook
ripol	2273.00		NIST Webbook
ripol	2275.00		NIST Webbook
ripol	2273.00		NIST Webbook
ripol	2306.00		NIST Webbook
ripol	2325.00		NIST Webbook
ripol	2226.00		NIST Webbook
ripol	2268.00		NIST Webbook

ripol	2290.00		NIST Webbook
tb	619.57	K	Joback Method
tc	808.41	K	Joback Method
tf	331.18	K	Joback Method
vc	0.544	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	411.19	J/mol×K	619.57	Joback Method
cpg	424.90	J/mol×K	651.04	Joback Method
cpg	437.94	J/mol×K	682.52	Joback Method
cpg	450.41	J/mol×K	713.99	Joback Method
cpg	462.36	J/mol×K	745.46	Joback Method
cpg	473.88	J/mol×K	776.94	Joback Method
cpg	485.04	J/mol×K	808.41	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=C1946005&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