p-Menthane-3,8-diol, cis-1,3,trans-1,4-

Other names:	(1R,2R,5R)-2-(2-Hydroxypropan-2-yl)-5-methylcyclohexanol
	Cyclohexanemethanol, 2-hydroxy-«alpha»,«alpha»,4-trimethyl-, (1-«alpha»,2-«beta»,4-«beta»)-
	Menthoglycol
	Cyclohexanemethanol, 2-hydroxy-«alpha»,«alpha»,4-trimethyl-, (1R,2R,4E)-
	Isopulegol hydrate
	8-Hydroxymenthol
	p-Menthane-3,8-diol
Inchi:	InChI=1S/C10H20O2/c1-7-4-5-8(9(11)6-7)10(2,3)12/h7-9,11-12H,4-6H2,1-3H3/t7-,8-,9-/r
InchiKey:	LMXFTMYMHGYJEI-IWSPIJDZSA-N
Formula:	C10H20O2
SMILES:	CC1CCC(C(C)(C)O)C(O)C1
Mol. weight [g/mol]:	172.26
CAS:	3564-98-5

Physical Properties

Property code	Value	Unit	Source
gf	-228.45	kJ/mol	Joback Method
hf	-549.30	kJ/mol	Joback Method
hfus	16.39	kJ/mol	Joback Method
hvap	69.73	kJ/mol	Joback Method
log10ws	-2.17		Crippen Method
logp	1.554		Crippen Method
mcvol	152.640	ml/mol	McGowan Method
pc	2966.57	kPa	Joback Method
rinpol	1301.00		NIST Webbook
ripol	2165.00		NIST Webbook
tb	619.54	K	Joback Method
tc	805.67	K	Joback Method
tf	325.42	K	Joback Method
vc	0.553	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	438.77	J/mol×K	619.54	Joback Method
cpg	453.75	J/mol×K	650.56	Joback Method
cpg	467.92	J/mol×K	681.58	Joback Method
cpg	481.29	J/mol×K	712.60	Joback Method
cpg	493.90	J/mol×K	743.63	Joback Method
cpg	505.77	J/mol×K	774.65	Joback Method
cpg	516.94	J/mol×K	805.67	Joback Method
dvisc	0.0261661	Pa×s	325.42	Joback Method
dvisc	0.0041776	Pa×s	374.44	Joback Method
dvisc	0.0010200	Pa×s	423.46	Joback Method
dvisc	0.0003337	Pa×s	472.48	Joback Method
dvisc	0.0001347	Pa×s	521.50	Joback Method
dvisc	0.0000635	Pa×s	570.52	Joback Method
dvisc	0.0000337	Pa×s	619.54	Joback Method

Sources

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=C3564985&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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