Cyclohexanol, 4-methyl-

Other names:	1-Methyl-4-cyclohexanol
	4-Methylcyclohexanol
	4-Methylcyclohexanol cis+trans
	4-Methylcyclohexanol,c&t
	4-methylcyclohexanol (cis+trans)
	4-methylcyclohexanol, mixed isomers
	cyclohexanol, 4-methyl- (cis+trans)
	p-Methylcyclohexanol
Inchi:	InChI=1S/C7H14O/c1-6-2-4-7(8)5-3-6/h6-8H,2-5H2,1H3
InchiKey:	MQWCXKGKQLNYQG-UHFFFAOYSA-N
Formula:	C7H14O
SMILES:	CC1CCC(O)CC1
Mol. weight [g/mol]:	114.19
CAS:	589-91-3

Physical Properties

Property code	Value	Unit	Source
gf	-112.02	kJ/mol	Joback Method
hf	-306.06	kJ/mol	Joback Method
hfus	10.88	kJ/mol	Joback Method
hvap	65.90	kJ/mol	NIST Webbook
log10ws	-0.88		Aqueous Solubility Prediction Method
logp	1.557		Crippen Method
mcvol	104.500	ml/mol	McGowan Method
pc	3782.33	kPa	Joback Method
rinpol	941.00		NIST Webbook
rinpol	941.00		NIST Webbook
rinpol	926.00		NIST Webbook
rinpol	929.00		NIST Webbook
rinpol	929.00		NIST Webbook
tb	445.20	K	NIST Webbook
tc	659.09	K	Joback Method
tf	232.61	K	Joback Method
vc	0.379	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	231.22	J/mol×K	466.62	Joback Method
cpg	296.01	J/mol×K	627.01	Joback Method
cpg	284.31	J/mol×K	594.94	Joback Method
cpg	271.99	J/mol×K	562.86	Joback Method
cpg	259.05	J/mol×K	530.78	Joback Method
cpg	245.46	J/mol×K	498.70	Joback Method
cpg	307.10	J/mol×K	659.09	Joback Method
cpl	202.10	J/mol×K	290.00	NIST Webbook
dvisc	0.0112900	Pa×s	271.61	Joback Method
dvisc	0.0034480	Pa×s	310.61	Joback Method
dvisc	0.0013721	Pa×s	349.62	Joback Method
dvisc	0.0006569	Pa×s	388.62	Joback Method
dvisc	0.0003597	Pa×s	427.62	Joback Method
dvisc	0.0550246	Pa×s	232.61	Joback Method
dvisc	0.0002179	Pa×s	466.62	Joback Method
srf	0.03	N/m	323.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols
srf	0.03	N/m	318.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols
srf	0.03	N/m	313.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols
srf	0.03	N/m	308.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols

srf	0.03	N/m	303.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols
srf	0.03	N/m	298.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols
srf	0.03	N/m	293.15	Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols

Sources

Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C589913&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Surface Properties of Pure Liquids and Binary Liquid Mixtures of Ethylene Glycol + Methylcyclohexanols:	https://www.doi.org/10.1021/je049919e
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
cpl:	Liquid phase 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

srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume