Cyclohexanol, 2,6-dimethyl-

Other names:	2,6-Dimethylcyclohexanol
	2,6-Dimethylcyclohexanol,c&t
	2,6-dimethylcyclohexan-1-ol
Inchi:	InChI=1S/C8H16O/c1-6-4-3-5-7(2)8(6)9/h6-9H,3-5H2,1-2H3
InchiKey:	MOISVRZIQDQVPF-UHFFFAOYSA-N
Formula:	C8H16O
SMILES:	CC1CCCC(C)C1O
Mol. weight [g/mol]:	128.21
CAS:	5337-72-4

Physical Properties

Property code	Value	Unit	Source
chl	-5044.20	kJ/mol	NIST Webbook
gf	-111.31	kJ/mol	Joback Method
hf	-347.04	kJ/mol	Joback Method
hfus	14.54	kJ/mol	Joback Method
hvap	49.89	kJ/mol	Joback Method
log10ws	-1.96		Crippen Method
logp	1.803		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3246.73	kPa	Joback Method
rinpol	1111.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1114.00		NIST Webbook
rinpol	1114.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1114.00		NIST Webbook
rinpol	1110.00		NIST Webbook
rinpol	1114.00		NIST Webbook
tb	447.70	K	NIST Webbook
tc	674.82	K	Joback Method
tf	239.64	K	Joback Method
vc	0.433	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	276.01	J/mol×K	484.83	Joback Method
cpg	291.52	J/mol×K	516.49	Joback Method
cpg	306.35	J/mol×K	548.16	Joback Method
cpg	320.50	J/mol×K	579.82	Joback Method
cpg	334.00	J/mol×K	611.49	Joback Method
cpg	346.84	J/mol×K	643.15	Joback Method
cpg	359.03	J/mol×K	674.82	Joback Method
dvisc	0.0327662	Pa×s	239.64	Joback Method
dvisc	0.0075606	Pa×s	280.50	Joback Method
dvisc	0.0025331	Pa×s	321.37	Joback Method
dvisc	0.0010862	Pa×s	362.24	Joback Method
dvisc	0.0005530	Pa×s	403.10	Joback Method
dvisc	0.0003188	Pa×s	443.97	Joback Method
dvisc	0.0002017	Pa×s	484.83	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.49636e+01
Coeff. B	-4.08443e+03
Coeff. C	-6.60140e+01
Temperature range (K), min.	344.32
Temperature range (K), max.	489.18

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=C5337724&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

chl:	Standard liquid enthalpy of combustion
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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume