Cyclohexanol, 3,5-dimethyl-

Other names: 3,5-Dimethylcyclohexanol
3,5-Dimethylcyclohexanol,c&t
3,5-dimethylcyclohexan-1-ol
Inchi: InChI=1S/C8H16O/c1-6-3-7(2)5-8(9)4-6/h6-9H,3-5H2,1-2H3
InchiKey: WIYNOPYNRFPWNB-UHFFFAOYSA-N
Formula: C8H16O
SMILES: CC1CC(C)CC(O)C1
Mol. weight [g/mol]: 128.21
CAS: 5441-52-1

Physical Properties

Property code	Value	Unit	Source
chl	-4990.70	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	974.00		NIST Webbook
rinpol	972.00		NIST Webbook
ripol	1809.00		NIST Webbook
tb	458.70	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	346.84	J/mol×K	643.15	Joback Method

cpg	334.00	J/mol×K	611.49	Joback Method
cpg	320.50	J/mol×K	579.82	Joback Method
cpg	306.35	J/mol×K	548.16	Joback Method
cpg	291.52	J/mol×K	516.49	Joback Method
cpg	359.03	J/mol×K	674.82	Joback Method
dvisc	0.0002017	Pa×s	484.83	Joback Method
dvisc	0.0003188	Pa×s	443.97	Joback Method
dvisc	0.0005530	Pa×s	403.10	Joback Method
dvisc	0.0010862	Pa×s	362.24	Joback Method
dvisc	0.0025331	Pa×s	321.37	Joback Method
dvisc	0.0075606	Pa×s	280.50	Joback Method
dvisc	0.0327662	Pa×s	239.64	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.62696e+01
Coeff. B	-4.53965e+03
Coeff. C	-6.90720e+01
Temperature range (K), min.	353.12
Temperature range (K), max.	483.35

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5441521&Units=SI

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

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

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume