Cyclohexaneethanol

Other names:	(2-hydroxyethyl)cyclohexane
	.beta.-cyclohexylethyl alcohol
	2-Cyclohexylethyl alcohol
	2-cyclohexylethanol
	Ethanol, 2-cyclohexyl-
	Hexahydrophenylethyl alcohol
	NSC 30157
	cyclohexylethanol
	cyclohexylethyl alcohol
	«beta»-Cyclohexyl ethanol
	«beta»-Cyclohexylethyl alcohol
Inchi:	InChI=1S/C8H16O/c9-7-6-8-4-2-1-3-5-8/h8-9H,1-7H2
InchiKey:	QJQZRLXDLORINA-UHFFFAOYSA-N
Formula:	C8H16O
SMILES:	OCCC1CCCCC1
Mol. weight [g/mol]:	128.21
CAS:	4442-79-9

Physical Properties

Property code	Value	Unit	Source
gf	-95.89	kJ/mol	Joback Method
hf	-306.36	kJ/mol	Joback Method
hfus	12.40	kJ/mol	Joback Method
hvap	50.51	kJ/mol	Joback Method
log10ws	-2.09		Crippen Method
logp	1.949		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3505.43	kPa	Joback Method
rinpol	1098.00		NIST Webbook
rinpol	1098.00		NIST Webbook
ripol	1668.00		NIST Webbook
ripol	1668.00		NIST Webbook
tb	494.17	K	Joback Method
tc	684.73	K	Joback Method
tf	248.12	K	Joback Method
vc	0.435	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	274.70	J/mol×K	494.17	Joback Method
cpg	289.54	J/mol×K	525.93	Joback Method
cpg	303.66	J/mol×K	557.69	Joback Method
cpg	317.07	J/mol×K	589.45	Joback Method
cpg	329.79	J/mol×K	621.21	Joback Method
cpg	341.85	J/mol×K	652.97	Joback Method
cpg	353.26	J/mol×K	684.73	Joback Method
cpl	222.00	J/mol×K	253.50	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	223.33	J/mol×K	253.50	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	226.07	J/mol×K	256.05	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	226.32	J/mol×K	256.05	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	229.40	J/mol×K	260.65	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	229.73	J/mol×K	260.65	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	233.72	J/mol×K	265.75	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	233.97	J/mol×K	265.75	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	238.29	J/mol×K	270.86	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	238.21	J/mol×K	270.86	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols

cpl	242.12	J/mol×K	275.96	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	242.20	J/mol×K	275.96	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	246.19	J/mol×K	281.07	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	246.44	J/mol×K	281.07	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	251.60	J/mol×K	286.17	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	251.26	J/mol×K	286.17	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	256.67	J/mol×K	291.28	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	256.42	J/mol×K	291.28	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	261.91	J/mol×K	296.38	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	262.07	J/mol×K	296.38	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	267.56	J/mol×K	301.48	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	317.95	J/mol×K	347.43	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	273.13	J/mol×K	306.59	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	273.21	J/mol×K	306.59	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	278.70	J/mol×K	311.70	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols

cpl	279.03	J/mol×K	311.70	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	284.35	J/mol×K	316.81	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	284.35	J/mol×K	316.81	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	290.17	J/mol×K	321.91	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	289.93	J/mol×K	321.91	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	295.50	J/mol×K	327.01	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	295.58	J/mol×K	327.01	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	301.15	J/mol×K	332.12	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	300.82	J/mol×K	332.12	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	322.60	J/mol×K	352.54	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	306.64	J/mol×K	337.22	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	313.87	J/mol×K	342.33	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	312.71	J/mol×K	342.33	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	318.61	J/mol×K	347.43	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols

cpl	266.98	J/mol×K	301.48	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	323.27	J/mol×K	352.54	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
cpl	307.39	J/mol×K	337.22	Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols
dvisc	0.0593770	Pa×s	248.12	Joback Method
dvisc	0.0112664	Pa×s	289.13	Joback Method
dvisc	0.0032306	Pa×s	330.14	Joback Method
dvisc	0.0012208	Pa×s	371.14	Joback Method
dvisc	0.0005599	Pa×s	412.15	Joback Method
dvisc	0.0002957	Pa×s	453.16	Joback Method
dvisc	0.0001736	Pa×s	494.17	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	479.70	K	99.30	NIST Webbook

Sources

Heat Capacities of 2-Propenol and Selected Cyclohexylalcohols:	https://www.doi.org/10.1016/j.tca.2014.03.043
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=C4442799&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
(Solid + liquid) equilibrium phase diagrams in binary mixtures containing terpenes. New experimental data and analysis of several modelling strategies with modified UNIFAC (Dortmund) and PC-SAFT equation of state:	https://www.doi.org/10.1016/j.fluid.2015.12.048
Solubility of fragrance raw materials in water: Experimental study, correlations, and Mod. UNIFAC (Do) predictions:	https://www.doi.org/10.1016/j.jct.2010.07.013

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