1,4-Cyclohexanedimethanol, trans-

Other names:	trans-1,4-Cyclohexanedimethanol (trans-4-Hydroxymethylcyclohexyl)methanol Cyclohex-1,4-ylenedimethanol, trans trans-1,4-Bis(hydroxymethyl)cyclohexane CHDM, trans isomer trans-CHDM
Inchi:	InChI=1S/C8H16O2/c9-5-7-1-2-8(6-10)4-3-7/h7-10H,1-6H2/t7-,8-
InchiKey:	YIMQCDZDWXUDCA-ZKCHVHJHSA-N
Formula:	C8H16O2
SMILES:	OCC1CCC(CO)CC1
Mol. weight [g/mol]:	144.21
CAS:	3236-48-4

Physical Properties

Property code	Value	Unit	Source
gf	-240.42	kJ/mol	Joback Method
hf	-478.93	kJ/mol	Joback Method
hfus	17.56	kJ/mol	Joback Method
hvap	66.88	kJ/mol	Joback Method
log10ws	-1.11		Crippen Method
logp	0.777		Crippen Method
mcvol	124.460	ml/mol	McGowan Method
pc	3763.78	kPa	Joback Method
tb	581.68	K	Joback Method
tc	762.42	K	Joback Method
tf	304.70	K	Joback Method
vc	0.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.28	J/mol×K	581.68	Joback Method
cpg	347.06	J/mol×K	611.80	Joback Method
cpg	359.21	J/mol×K	641.93	Joback Method

cpg	370.76	J/mol×K	672.05	Joback Method
cpg	381.72	J/mol×K	702.18	Joback Method
cpg	392.09	J/mol×K	732.30	Joback Method
cpg	401.91	J/mol×K	762.42	Joback Method
dvisc	0.0469058	Pa×s	304.70	Joback Method
dvisc	0.0070785	Pa×s	350.86	Joback Method
dvisc	0.0016582	Pa×s	397.03	Joback Method
dvisc	0.0005256	Pa×s	443.19	Joback Method
dvisc	0.0002069	Pa×s	489.35	Joback Method
dvisc	0.0000957	Pa×s	535.52	Joback Method
dvisc	0.0000500	Pa×s	581.68	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3236484&Units=SI
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

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

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