2H-Pyran-2-ol, tetrahydro-

Other names:	Tetrahydro-2-hydroxy-2H-pyran
	Tetrahydro-2-pyranol
	Tetrahydro-2H-pyran-2-ol
	2-Hydroxytetrahydropyran
	2-Tetrahydropyranol
	«delta»-Valerolactol
	Pyran-2-ol, tetrahydro-
Inchi:	InChI=1S/C5H10O2/c6-5-3-1-2-4-7-5/h5-6H,1-4H2
InchiKey:	CELWCAITJAEQNL-UHFFFAOYSA-N
Formula:	$C_5H_{10}O_2$
SMILES:	OC1CCCCO1
Mol. weight [g/mol]:	102.13
CAS:	694-54-2

Physical Properties

Property code	Value	Unit	Source
gf	-207.27	kJ/mol	Joback Method
hf	-376.44	kJ/mol	Joback Method
hfus	12.61	kJ/mol	Joback Method
hvap	48.34	kJ/mol	Joback Method
log10ws	-0.77		Crippen Method
logp	0.505		Crippen Method
mcvol	82.190	ml/mol	McGowan Method
pc	5029.93	kPa	Joback Method
tb	452.48	K	Joback Method
tc	649.36	K	Joback Method
tf	240.88	K	Joback Method
vc	0.288	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	175.96	J/mol×K	452.48	Joback Method
cpg	187.33	J/mol×K	485.29	Joback Method

cpg	198.15	J/mol×K	518.11	Joback Method
cpg	208.42	J/mol×K	550.92	Joback Method
cpg	218.15	J/mol×K	583.73	Joback Method
cpg	227.36	J/mol×K	616.54	Joback Method
cpg	236.06	J/mol×K	649.36	Joback Method
dvisc	0.0680898	Pa×s	240.88	Joback Method
dvisc	0.0150108	Pa×s	276.15	Joback Method
dvisc	0.0046608	Pa×s	311.41	Joback Method
dvisc	0.0018359	Pa×s	346.68	Joback Method
dvisc	0.0008590	Pa×s	381.95	Joback Method
dvisc	0.0004569	Pa×s	417.21	Joback Method
dvisc	0.0002682	Pa×s	452.48	Joback Method

Sources

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=C694542&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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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