2H-Pyran, tetrahydro-2-methoxy-

Other names: 2-Methoxytetrahydropyran
tetrahydro-2-methoxy-2H-pyran
Inchi: InChI=1S/C6H12O2/c1-7-6-4-2-3-5-8-6/h6H,2-5H2,1H3
InchiKey: XTDKZSUYCXHXJM-UHFFFAOYSA-N
Formula: C6H12O2
SMILES: COC1CCCCO1
Mol. weight [g/mol]: 116.16
CAS: 6581-66-4

Physical Properties

Property code	Value	Unit	Source
chl	-3633.80 ± 1.30	kJ/mol	NIST Webbook
gf	-167.03	kJ/mol	Joback Method
hf	-377.07	kJ/mol	Joback Method
hfus	12.30	kJ/mol	Joback Method
hvap	39.30 ± 1.20	kJ/mol	NIST Webbook
log10ws	-1.01		Crippen Method
logp	1.159		Crippen Method
mcvol	96.280	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
rinpol	870.00		NIST Webbook
rinpol	870.00		NIST Webbook
rinpol	890.00		NIST Webbook
sg	367.40	J/mol×K	NIST Webbook
tb	401.70	K	NIST Webbook
tc	609.91	K	Joback Method
tf	213.56	K	Joback Method
vc	0.344	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.92	J/mol×K	609.91	Joback Method
cpg	187.93	J/mol×K	405.60	Joback Method

cpg	202.04	J/mol×K	439.65	Joback Method
cpg	215.57	J/mol×K	473.70	Joback Method
cpg	228.52	J/mol×K	507.75	Joback Method
cpg	240.90	J/mol×K	541.81	Joback Method
cpg	252.69	J/mol×K	575.86	Joback Method
dvisc	0.0002972	Pa×s	405.60	Joback Method
dvisc	0.0059104	Pa×s	213.56	Joback Method
dvisc	0.0025951	Pa×s	245.57	Joback Method
dvisc	0.0013776	Pa×s	277.57	Joback Method
dvisc	0.0008336	Pa×s	309.58	Joback Method
dvisc	0.0005542	Pa×s	341.59	Joback Method
dvisc	0.0003952	Pa×s	373.59	Joback Method
hvapt	42.70	kJ/mol	293.00	NIST Webbook

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=C6581664&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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

hvapt: Enthalpy of vaporization at a given temperature

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

sg: Molar entropy at standard conditions

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