2H-Pyran, tetrahydro-2-(1-methylethoxy)-

Other names: 2H-Pyran, tetrahydro-2-isopropoxy-
Tetrahydro-2-isopropoxypyran
2-Isopropoxytetrahydropyran
Inchi: InChI=1S/C8H16O2/c1-7(2)10-8-5-3-4-6-9-8/h7-8H,3-6H2,1-2H3
InchiKey: ZGXPHCSAAJGIJC-UHFFFAOYSA-N
Formula: C8H16O2
SMILES: CC(C)OC1CCCCO1
Mol. weight [g/mol]: 144.21
CAS: 1927-70-4

Physical Properties

Property code	Value	Unit	Source
gf	-152.63	kJ/mol	Joback Method
hf	-423.63	kJ/mol	Joback Method
hfus	13.95	kJ/mol	Joback Method
hvap	40.36	kJ/mol	Joback Method
log10ws	-1.96		Crippen Method
logp	1.938		Crippen Method
mcvol	124.460	ml/mol	McGowan Method
pc	3089.85	kPa	Joback Method
rinpol	950.00		NIST Webbook
rinpol	950.00		NIST Webbook
rinpol	950.00		NIST Webbook
tb	450.92	K	Joback Method
tc	655.55	K	Joback Method
tf	221.10	K	Joback Method
vc	0.450	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	270.79	J/mol×K	450.92	Joback Method
cpg	287.78	J/mol×K	485.02	Joback Method
cpg	304.00	J/mol×K	519.13	Joback Method

cpg	319.47	J/mol×K	553.23	Joback Method
cpg	334.20	J/mol×K	587.34	Joback Method
cpg	348.18	J/mol×K	621.44	Joback Method
cpg	361.43	J/mol×K	655.55	Joback Method
dvisc	0.0096648	Pa×s	221.10	Joback Method
dvisc	0.0033763	Pa×s	259.40	Joback Method
dvisc	0.0015461	Pa×s	297.71	Joback Method
dvisc	0.0008460	Pa×s	336.01	Joback Method
dvisc	0.0005237	Pa×s	374.31	Joback Method
dvisc	0.0003544	Pa×s	412.62	Joback Method
dvisc	0.0002563	Pa×s	450.92	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1927704&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

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume