2H-Pyran, 2-butoxytetrahydro-

Other names: 2-Butoxyoxane
2-Butoxytetrahydropyran
Inchi: InChI=1S/C9H18O2/c1-2-3-7-10-9-6-4-5-8-11-9/h9H,2-8H2,1H3
InchiKey: HVHNQFALNKRKQY-UHFFFAOYSA-N
Formula: C9H18O2
SMILES: CCCCOC1CCCCO1
Mol. weight [g/mol]: 158.24
CAS: 1927-68-0

Physical Properties

Property code	Value	Unit	Source
gf	-141.77	kJ/mol	Joback Method
hf	-438.99	kJ/mol	Joback Method
hfus	20.07	kJ/mol	Joback Method
hvap	42.98	kJ/mol	Joback Method
log10ws	-2.27		Crippen Method
logp	2.330		Crippen Method
mcvol	138.550	ml/mol	McGowan Method
pc	2761.36	kPa	Joback Method
rinpol	1100.00		NIST Webbook
rinpol	1100.00		NIST Webbook
rinpol	1100.00		NIST Webbook
tb	474.24	K	Joback Method
tc	671.74	K	Joback Method
tf	247.37	K	Joback Method
vc	0.511	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.31	J/mol×K	474.24	Joback Method
cpg	332.79	J/mol×K	507.16	Joback Method
cpg	349.50	J/mol×K	540.07	Joback Method
cpg	365.43	J/mol×K	572.99	Joback Method

cpg	380.61	J/mol×K	605.91	Joback Method
cpg	395.04	J/mol×K	638.83	Joback Method
cpg	408.73	J/mol×K	671.74	Joback Method
dvisc	0.0058573	Pa×s	247.37	Joback Method
dvisc	0.0024435	Pa×s	285.18	Joback Method
dvisc	0.0012509	Pa×s	322.99	Joback Method
dvisc	0.0007368	Pa×s	360.81	Joback Method
dvisc	0.0004799	Pa×s	398.62	Joback Method
dvisc	0.0003366	Pa×s	436.43	Joback Method
dvisc	0.0002499	Pa×s	474.24	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1927680&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

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