Furan, 2-butyltetrahydro-

Other names: Octane, 1,4-epoxy-
2-Butyltetrahydrofuran
Inchi: InChI=1S/C8H16O/c1-2-3-5-8-6-4-7-9-8/h8H,2-7H2,1H3
InchiKey: GBOMEIMCQWMHGB-UHFFFAOYSA-N
Formula: C8H16O
SMILES: CCCCC1CCCO1
Mol. weight [g/mol]: 128.21
CAS: 1004-29-1

Physical Properties

Property code	Value	Unit	Source
gf	-33.09	kJ/mol	Joback Method
hf	-279.97	kJ/mol	Joback Method
hfus	18.39	kJ/mol	Joback Method
hvap	38.17	kJ/mol	Joback Method
log10ws	-2.26		Crippen Method
logp	2.356		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3035.62	kPa	Joback Method
rinpol	981.00		NIST Webbook
rinpol	975.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	981.00		NIST Webbook
rinpol	1026.00		NIST Webbook
tb	424.67	K	Joback Method
tc	617.77	K	Joback Method
tf	217.39	K	Joback Method
vc	0.446	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	245.61	J/mol×K	424.67	Joback Method
cpg	318.16	J/mol×K	585.59	Joback Method

cpg	305.08	J/mol×K	553.40	Joback Method
cpg	291.31	J/mol×K	521.22	Joback Method
cpg	276.82	J/mol×K	489.04	Joback Method
cpg	261.60	J/mol×K	456.85	Joback Method
cpg	330.57	J/mol×K	617.77	Joback Method
dvisc	0.0003594	Pa×s	424.67	Joback Method
dvisc	0.0004617	Pa×s	390.12	Joback Method
dvisc	0.0006228	Pa×s	355.58	Joback Method
dvisc	0.0008959	Pa×s	321.03	Joback Method
dvisc	0.0014069	Pa×s	286.48	Joback Method
dvisc	0.0025005	Pa×s	251.94	Joback Method
dvisc	0.0053353	Pa×s	217.39	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1004291&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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