Furan, 2,3-dihydro-

Other names: 2,3-Dihydrofuran
4,5-Dihydrofuran
Inchi: InChI=1S/C4H6O/c1-2-4-5-3-1/h1,3H,2,4H2
InchiKey: JKTCBAGSMQIFNL-UHFFFAOYSA-N
Formula: C4H6O
SMILES: C1=COCC1
Mol. weight [g/mol]: 70.09
CAS: 1191-99-7

Physical Properties

Property code	Value	Unit	Source
affp	866.90	kJ/mol	NIST Webbook
basg	834.40	kJ/mol	NIST Webbook
chl	-2328.51 ± 0.38	kJ/mol	NIST Webbook
gf	-29.10	kJ/mol	Joback Method
hf	-72.25 ± 0.41	kJ/mol	NIST Webbook
hfl	-103.02 ± 0.38	kJ/mol	NIST Webbook
hfus	8.18	kJ/mol	Joback Method
hvap	30.77 ± 0.08	kJ/mol	NIST Webbook
hvap	30.80	kJ/mol	NIST Webbook
log10ws	-0.83		Crippen Method
logp	0.920		Crippen Method
mcvol	57.930	ml/mol	McGowan Method
pc	5390.71	kPa	Joback Method
tb	328.15 ± 3.00	K	NIST Webbook
tb	327.70	K	NIST Webbook
tc	537.92	K	Joback Method
tf	177.31	K	Joback Method
vc	0.208	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	84.76	J/mol×K	336.98	Joback Method

cpg	125.30	J/mol×K	504.43	Joback Method
cpg	118.18	J/mol×K	470.94	Joback Method
cpg	110.58	J/mol×K	437.45	Joback Method
cpg	102.50	J/mol×K	403.96	Joback Method
cpg	93.90	J/mol×K	370.47	Joback Method
cpg	131.98	J/mol×K	537.92	Joback Method
cpl	122.10	J/mol×K	298.15	NIST Webbook
dvisc	0.0045332	Pa×s	177.31	Joback Method
dvisc	0.0003333	Pa×s	336.98	Joback Method
dvisc	0.0004273	Pa×s	310.37	Joback Method
dvisc	0.0005740	Pa×s	283.76	Joback Method
dvisc	0.0008196	Pa×s	257.14	Joback Method
dvisc	0.0012707	Pa×s	230.53	Joback Method
dvisc	0.0022090	Pa×s	203.92	Joback Method
hvapt	30.80 ± 0.10	kJ/mol	281.00	NIST Webbook
hvapt	28.60 ± 0.30	kJ/mol	331.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1191997&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

affp: Proton affinity
basg: Gas basicity
chl: Standard liquid enthalpy of combustion
cpg: Ideal gas heat capacity
cpl: Liquid phase heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfl: Liquid phase 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume