Furan, 2,5-dihydro-

Other names: 1-OXA-3-CYCLOPENTENE
2,5-Dihydrofuran
3-OXOLENE
Inchi: InChI=1S/C4H6O/c1-2-4-5-3-1/h1-2H,3-4H2
InchiKey: ARGCQEVBJHPOGB-UHFFFAOYSA-N
Formula: C4H6O
SMILES: C1=CCOC1
Mol. weight [g/mol]: 70.09
CAS: 1708-29-8

Physical Properties

Property code	Value	Unit	Source
affp	823.40	kJ/mol	NIST Webbook
basg	796.00	kJ/mol	NIST Webbook
gf	-29.10	kJ/mol	Joback Method
hf	-119.29	kJ/mol	Joback Method
hfus	8.18	kJ/mol	Joback Method
hvap	29.87	kJ/mol	Joback Method
ie	9.16	eV	NIST Webbook
ie	9.16	eV	NIST Webbook
ie	9.14 ± 0.02	eV	NIST Webbook
log10ws	-0.33		Crippen Method
logp	0.573		Crippen Method
mcvol	57.930	ml/mol	McGowan Method
pc	5390.71	kPa	Joback Method
tb	340.15 ± 2.00	K	NIST Webbook
tb	339.65 ± 3.00	K	NIST Webbook
tb	337.40 ± 1.50	K	NIST Webbook
tb	339.70	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	93.90	J/mol×K	370.47	Joback Method
cpg	102.50	J/mol×K	403.96	Joback Method
cpg	110.58	J/mol×K	437.45	Joback Method
cpg	118.18	J/mol×K	470.94	Joback Method
cpg	125.30	J/mol×K	504.43	Joback Method
cpg	131.98	J/mol×K	537.92	Joback Method
dvisc	0.0045332	Pa×s	177.31	Joback Method
dvisc	0.0022090	Pa×s	203.92	Joback Method
dvisc	0.0012707	Pa×s	230.53	Joback Method
dvisc	0.0008196	Pa×s	257.14	Joback Method
dvisc	0.0005740	Pa×s	283.76	Joback Method
dvisc	0.0004273	Pa×s	310.37	Joback Method
dvisc	0.0003333	Pa×s	336.98	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.44634e+01
Coeff. B	-2.92759e+03
Coeff. C	-4.16340e+01
Temperature range (K), min.	248.15
Temperature range (K), max.	361.52

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	6.83863e+01
Coeff. B	-6.07396e+03
Coeff. C	-7.98630e+00
Coeff. D	5.92788e-06
Temperature range (K), min.	273.00

Temperature range (K), max.	542.00

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1708298&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
KDB Vapor Pressure Data:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1034
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
KDB:	https://www.cheric.org/files/research/kdb/mol/mol1034.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

affp:	Proton affinity
basg:	Gas basicity
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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume