2-Furoic acid, tetrahydro

Other names: 2-Furancarboxylic acid, tetrahydro-
Tetrahydro-2-furancarboxylic acid
Inchi: InChI=1S/C5H8O3/c6-5(7)4-2-1-3-8-4/h4H,1-3H2,(H,6,7)/t4-/m1/s1
InchiKey: UJJLJRQIPMGXEZ-SCSAIBSYSA-N
Formula: C5H8O3
SMILES: O=C(O)C1CCCO1
Mol. weight [g/mol]: 116.12
CAS: 16874-33-2

Physical Properties

Property code	Value	Unit	Source
gf	-324.09	kJ/mol	Joback Method
hf	-482.86	kJ/mol	Joback Method
hfus	16.31	kJ/mol	Joback Method
hvap	54.92	kJ/mol	Joback Method
log10ws	-0.11		Crippen Method
logp	0.250		Crippen Method
mcvol	83.760	ml/mol	McGowan Method
pc	5312.41	kPa	Joback Method
tb	502.08	K	Joback Method
tc	701.79	K	Joback Method
tf	294.33	K	Joback Method
vc	0.302	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.84	J/mol×K	502.08	Joback Method
cpg	234.94	J/mol×K	668.51	Joback Method
cpg	227.34	J/mol×K	635.22	Joback Method
cpg	219.24	J/mol×K	601.94	Joback Method
cpg	210.64	J/mol×K	568.65	Joback Method
cpg	201.51	J/mol×K	535.37	Joback Method
cpg	242.08	J/mol×K	701.79	Joback Method

dvisc	0.0002734	Pa×s	502.08	Joback Method
dvisc	0.0004184	Pa×s	467.45	Joback Method
dvisc	0.0006854	Pa×s	432.83	Joback Method
dvisc	0.0012236	Pa×s	398.20	Joback Method
dvisc	0.0024394	Pa×s	363.58	Joback Method
dvisc	0.0056232	Pa×s	328.95	Joback Method
dvisc	0.0157770	Pa×s	294.33	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	401.70	K	1.70	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C16874332&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
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume