Furan, tetrahydro-2,5-dimethyl-, cis-

Other names: 2,5-Dimethyltetrahydrofuran, (Z)-
cis-2,5-Dimethyltetrahydrofuran
cis-Tetrahydro-2,5-Dimethylfuran
Inchi: InChI=1S/C6H12O/c1-5-3-4-6(2)7-5/h5-6H,3-4H2,1-2H3/t5-,6+
InchiKey: OXMIDRBAFOEOQT-OLQVQODUSA-N
Formula: C6H12O
SMILES: CC1CCC(C)O1
Mol. weight [g/mol]: 100.16
CAS: 2144-41-4

Physical Properties

Property code	Value	Unit	Source
gf	-57.64	kJ/mol	Joback Method
hf	-259.03	kJ/mol	Joback Method
hfus	14.28	kJ/mol	Joback Method
hvap	33.41	kJ/mol	Joback Method
log10ws	-1.54		Crippen Method
logp	1.574		Crippen Method
mcvol	90.410	ml/mol	McGowan Method
pc	3646.53	kPa	Joback Method
tb	364.65 ± 1.00	K	NIST Webbook
tc	569.86	K	Joback Method
tf	190.61	K	Joback Method
vc	0.333	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	165.98	J/mol×K	374.24	Joback Method
cpg	229.04	J/mol×K	537.25	Joback Method
cpg	217.59	J/mol×K	504.65	Joback Method
cpg	205.56	J/mol×K	472.05	Joback Method
cpg	192.97	J/mol×K	439.45	Joback Method
cpg	179.78	J/mol×K	406.84	Joback Method

cpg	239.94	J/mol×K	569.86	Joback Method
dvisc	0.0003240	Pa×s	374.24	Joback Method
dvisc	0.0003887	Pa×s	343.63	Joback Method
dvisc	0.0004833	Pa×s	313.03	Joback Method
dvisc	0.0006300	Pa×s	282.43	Joback Method
dvisc	0.0008757	Pa×s	251.82	Joback Method
dvisc	0.0013336	Pa×s	221.22	Joback Method
dvisc	0.0023244	Pa×s	190.61	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2144414&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Solubilities of gases in cycloethers.	https://www.doi.org/10.1016/j.jct.2018.12.037
The solubility of 13 nonpolar gases in 2,5-dimethyltetrahydrofuran at 273.15 to 303.15 K and 101.32 kPa:	https://www.doi.org/10.1021/acs.jced.6b00576
Vapor Pressure and Its Temperature Dependence of 20 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols:	http://link.springer.com/article/10.1007/BF02311772
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan 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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume