Furan, tetrahydro-2,2,5,5-tetramethyl-

Other names: 2,2,5,5-Tetramethyltetrahydrofuran
Tetrahydro-2,2,5,5-tetramethylfuran
Inchi: InChI=1S/C8H16O/c1-7(2)5-6-8(3,4)9-7/h5-6H2,1-4H3
InchiKey: BBLDTXFLAHKYFJ-UHFFFAOYSA-N
Formula: C8H16O
SMILES: CC1(C)CCC(C)(C)O1
Mol. weight [g/mol]: 128.21
CAS: 15045-43-9

Physical Properties

Property code	Value	Unit	Source
gf	-51.78	kJ/mol	Joback Method
hf	-269.83	kJ/mol	Joback Method
hfus	6.86	kJ/mol	Joback Method
hvap	35.56	kJ/mol	Joback Method
log10ws	-2.38		Crippen Method
logp	2.354		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3235.66	kPa	Joback Method
rinpol	759.00		NIST Webbook
tb	384.20	K	NIST Webbook
tc	631.03	K	Joback Method
tf	260.95	K	Joback Method
vc	0.441	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	247.46	J/mol×K	420.48	Joback Method
cpg	264.96	J/mol×K	455.57	Joback Method
cpg	280.97	J/mol×K	490.66	Joback Method
cpg	295.67	J/mol×K	525.75	Joback Method
cpg	309.25	J/mol×K	560.85	Joback Method
cpg	321.88	J/mol×K	595.94	Joback Method

cpg	333.73	J/mol×K	631.03	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=C15045439&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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