Furan, tetrahydro-2,2-dimethyl-5-(1-methyl-1-propenyl)-

Other names:	2,2-dimethyl-5-(1 -methyl-1-propenyl)-tetrahydrofuran
	2,2-dimethyl-5-(1-methylpropenyl)tetrahydrofuran
	Tetrahydrofuran, 2,2-dimethyl-5-(1-methylpropenyl)
Inchi:	InChI=1S/C10H18O/c1-5-8(2)9-6-7-10(3,4)11-9/h5,9H,6-7H2,1-4H3/b8-5+
InchiKey:	LPEYLSKLVYWOEQ-VMPITWQZSA-N
Formula:	C10H18O
SMILES:	CC=C(C)C1CCC(C)(C)O1
Mol. weight [g/mol]:	154.25
CAS:	7416-35-5

Physical Properties

Property code	Value	Unit	Source
gf	42.22	kJ/mol	Joback Method
hf	-218.92	kJ/mol	Joback Method
hfus	17.23	kJ/mol	Joback Method
hvap	41.20	kJ/mol	Joback Method
log10ws	-3.07		Crippen Method
logp	2.910		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	2662.52	kPa	Joback Method
rinpol	1035.00		NIST Webbook
rinpol	1045.60		NIST Webbook
rinpol	1049.00		NIST Webbook
rinpol	1049.00		NIST Webbook
rinpol	1045.60		NIST Webbook
rinpol	1035.00		NIST Webbook
ripol	1198.00		NIST Webbook
ripol	1253.00		NIST Webbook
ripol	1237.00		NIST Webbook
ripol	1198.00		NIST Webbook
tb	470.04	K	Joback Method
tc	680.66	K	Joback Method
tf	240.55	K	Joback Method
vc	0.535	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	318.73	J/mol×K	470.04	Joback Method
cpg	337.23	J/mol×K	505.14	Joback Method
cpg	354.49	J/mol×K	540.25	Joback Method
cpg	370.63	J/mol×K	575.35	Joback Method
cpg	385.77	J/mol×K	610.45	Joback Method
cpg	400.02	J/mol×K	645.55	Joback Method
cpg	413.51	J/mol×K	680.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7416355&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
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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