2(3H)-Furanone, dihydro-5-(2-octenyl)-, (Z)-

Other names:	cis-4-Hydroxydodec-6-enoic acid lactone
	cis-6-Dodecen-4-olide
	cis-«gamma»-Dodec-6-enolactone
	(Z)-4-Hydroxy-6-dodecenoic acid lactone
	(Z)-6-Dodecen-4-olide
	5-[(2Z)-2-Octenyl]dihydro-2(3H)-furanone
	«gamma»-6-(Z)-Dodecenolactone
	«gamma»-Dodec-cis-6-enolactone
	6-(Z)-Dodecen-«gamma»-lactone
	(Z)-6-Dodecen-«gamma»-lactone
	(Z)-6-Dodeceno-«gamma»-lactone
	(Z)-6-Dodecenyl-«gamma»-lactone
	(Z)-Dodec-6-en-4-olide
	2(3H)-Furanone, dihydro-5-(2Z)-2-octen-1-yl-
	cis-6-Dodecen-«gamma»-lactone
	(Z)-6-«gamma»-Dodecenolactone
	cis-«gamma»-6-Dodecenolactone
	(Z)-dihydro-5-(2-octenyl)furan-2(3H)-one
Inchi:	InChI=1S/C12H20O2/c1-2-3-4-5-6-7-8-11-9-10-12(13)14-11/h6-7,11H,2-5,8-10H2,1H3/b
InchiKey:	QFXOXDSHNXAFEY-SREVYHEPSA-N
Formula:	C12H20O2
SMILES:	CCCCCC=CCC1CCC(=O)O1
Mol. weight [g/mol]:	196.29
CAS:	18679-18-0

Physical Properties

Property code	Value	Unit	Source
gf	-41.78	kJ/mol	Joback Method
hf	-383.01	kJ/mol	Joback Method
hfus	28.46	kJ/mol	Joback Method
hvap	51.28	kJ/mol	Joback Method
log10ws	-3.57		Crippen Method
logp	3.219		Crippen Method
mcvol	172.220	ml/mol	McGowan Method
pc	2241.88	kPa	Joback Method
rinpol	1651.00		NIST Webbook
rinpol	1675.00		NIST Webbook

rinpol	1663.00		NIST Webbook
rinpol	1657.00		NIST Webbook
rinpol	1656.00		NIST Webbook
rinpol	1661.00		NIST Webbook
rinpol	1655.00		NIST Webbook
rinpol	1660.00		NIST Webbook
rinpol	1662.00		NIST Webbook
rinpol	1676.00		NIST Webbook
rinpol	1670.00		NIST Webbook
rinpol	1657.00		NIST Webbook
rinpol	1680.00		NIST Webbook
rinpol	1670.00		NIST Webbook
rinpol	1650.00		NIST Webbook
rinpol	1656.00		NIST Webbook
ripol	2435.00		NIST Webbook
ripol	2405.00		NIST Webbook
ripol	2425.00		NIST Webbook
ripol	2396.00		NIST Webbook
ripol	2380.00		NIST Webbook
ripol	2425.00		NIST Webbook
ripol	2425.00		NIST Webbook
ripol	2393.00		NIST Webbook
ripol	2396.00		NIST Webbook
ripol	2394.00		NIST Webbook
ripol	2390.00		NIST Webbook
ripol	2393.00		NIST Webbook
ripol	2385.00		NIST Webbook
tb	588.17	K	Joback Method
tc	795.16	K	Joback Method
tf	325.61	K	Joback Method
vc	0.656	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	450.55	J/mol×K	588.17	Joback Method
cpg	468.68	J/mol×K	622.67	Joback Method
cpg	485.86	J/mol×K	657.17	Joback Method
cpg	502.11	J/mol×K	691.66	Joback Method
cpg	517.44	J/mol×K	726.16	Joback Method
cpg	531.90	J/mol×K	760.66	Joback Method

cpg	545.49	J/mol×K	795.16	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18679180&Units=SI

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