

# 2(3H)-Furanone, dihydro-5-phenyl-

<b>Other names:</b>	«gamma»-Phenyl-«gamma»-butyrolactone «gamma»-Phenylbutyrolactone 4-Phenyl-4-butanolide 4-Phenyl-4-hydroxybutanoic acid lactone 4-Phenylbutanolide 4-Phenylbutyrolactone 2(3H)-Furanone, 4,5-dihydro-5-phenyl- 4,5-Dihydro-5-phenyl-2(3H)-furanone 5-Phenyldihydrofuran-2(3H)-one NSC 24259 NSC 48048
<b>Inchi:</b>	InChI=1S/C10H10O2/c11-10-7-6-9(12-10)8-4-2-1-3-5-8/h1-5,9H,6-7H2
<b>InchiKey:</b>	AEUULUMEYIPECD-UHFFFAOYSA-N
<b>Formula:</b>	C10H10O2
<b>SMILES:</b>	O=C1CCC(c2ccccc2)O1
<b>Mol. weight [g/mol]:</b>	162.19
<b>CAS:</b>	1008-76-0

## Physical Properties

Property code	Value	Unit	Source
gf	-26.43	kJ/mol	Joback Method
hf	-222.42	kJ/mol	Joback Method
hfus	17.12	kJ/mol	Joback Method
hvap	49.14	kJ/mol	Joback Method
log10ws	-2.33		Crippen Method
logp	2.065		Crippen Method
mcvol	124.580	ml/mol	McGowan Method
pc	3713.49	kPa	Joback Method
tb	579.20	K	NIST Webbook
tc	819.33	K	Joback Method
tf	334.57	K	Joback Method
vc	0.457	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.93	J/mol×K	564.93	Joback Method
cpg	316.66	J/mol×K	607.33	Joback Method
cpg	332.21	J/mol×K	649.73	Joback Method
cpg	346.61	J/mol×K	692.13	Joback Method
cpg	359.87	J/mol×K	734.53	Joback Method
cpg	372.03	J/mol×K	776.93	Joback Method
cpg	383.10	J/mol×K	819.33	Joback Method

## Sources

Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C1008760&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1008760&amp;Units=SI</a>

## 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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