

# 5-Hydroxy-2,2,6,6-tetramethyl-4-cyclohexene-1,3-dione

<b>Other names:</b>	5-hydroxy-2,2,6,6-tetramethyl-4-cyclohexene-1,3-dione, enol form (syncarpic acid)
<b>Inchi:</b>	InChI=1S/C10H14O3/c1-9(2)6(11)5-7(12)10(3,4)8(9)13/h5,11H,1-4H3
<b>InchiKey:</b>	ICXMZHQQUWNXSF-UHFFFAOYSA-N
<b>Formula:</b>	C10H14O3
<b>SMILES:</b>	CC1(C)C(=O)C=C(O)C(C)(C)C1=O
<b>Mol. weight [g/mol]:</b>	182.22

## Physical Properties

Property code	Value	Unit	Source
gf	-322.59	kJ/mol	Joback Method
hf	-566.59	kJ/mol	Joback Method
hfus	5.91	kJ/mol	Joback Method
hvap	61.80	kJ/mol	Joback Method
log10ws	-1.65		Crippen Method
logp	1.632		Crippen Method
mcvol	145.610	ml/mol	McGowan Method
pc	3329.68	kPa	Joback Method
rinpol	1280.00		NIST Webbook
rinpol	1280.00		NIST Webbook
ripol	2190.00		NIST Webbook
ripol	2190.00		NIST Webbook
tb	675.52	K	Joback Method
tc	904.37	K	Joback Method
tf	463.94	K	Joback Method
vc	0.542	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	403.52	J/mol×K	675.52	Joback Method
cpg	417.74	J/mol×K	713.66	Joback Method
cpg	431.62	J/mol×K	751.80	Joback Method
cpg	445.32	J/mol×K	789.94	Joback Method
cpg	458.99	J/mol×K	828.09	Joback Method

cpg	472.78	J/mol×K	866.23	Joback Method
cpg	486.83	J/mol×K	904.37	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U360321&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U360321&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/85-629-0/5-Hydroxy-2-2-6-6-tetramethyl-4-cyclohexene-1-3-dione.pdf>

Generated by Cheméo on 2024-04-17 18:45:35.782819297 +0000 UTC m=+15668784.703396612.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.