

# 2,5,7,9-tetramethyl-2-decene-6,8-dione

<b>Other names:</b>	2,4,6,9-Tetramethyldec-8-en-3,5-dion (B)
<b>Inchi:</b>	InChI=1S/C14H24O2/c1-9(2)7-8-11(5)14(16)12(6)13(15)10(3)4/h7,10-12H,8H2,1-6H3
<b>InchiKey:</b>	VNEFXHWAHYWLHU-UHFFFAOYSA-N
<b>Formula:</b>	C14H24O2
<b>SMILES:</b>	CC(C)=CCC(C)C(=O)C(C)C(=O)C(C)C
<b>Mol. weight [g/mol]:</b>	224.34
<b>CAS:</b>	13851-07-5

## Physical Properties

Property code	Value	Unit	Source
gf	-126.49	kJ/mol	Joback Method
hf	-465.86	kJ/mol	Joback Method
hfus	23.54	kJ/mol	Joback Method
hvap	59.12	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.409		Crippen Method
mcvol	206.960	ml/mol	McGowan Method
pc	1803.09	kPa	Joback Method
rinpol	1469.00		NIST Webbook
rinpol	1492.50		NIST Webbook
rinpol	1492.50		NIST Webbook
rinpol	1469.00		NIST Webbook
ripol	1882.00		NIST Webbook
ripol	1882.00		NIST Webbook
tb	630.18	K	Joback Method
tc	824.55	K	Joback Method
tf	283.36	K	Joback Method
vc	0.794	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	545.13	J/molxK	630.18	Joback Method
cpg	561.92	J/molxK	662.57	Joback Method

cpg	577.81	J/mol×K	694.97	Joback Method
cpg	592.84	J/mol×K	727.36	Joback Method
cpg	607.05	J/mol×K	759.76	Joback Method
cpg	620.47	J/mol×K	792.15	Joback Method
cpg	633.14	J/mol×K	824.55	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C13851075&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C13851075&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>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</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>rinpola:</b>	Non-polar retention indices
<b>ripola:</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

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