

# Oxacyclopentadecan-2-one

<b>Other names:</b>	Cyclotetradecanolide Tetradecano-14-lactone Tetradecanolactone
<b>Inchi:</b>	InChI=1S/C14H26O2/c15-14-12-10-8-6-4-2-1-3-5-7-9-11-13-16-14/h1-13H2
<b>InchiKey:</b>	LFSYLMRHJKGLDV-UHFFFAOYSA-N
<b>Formula:</b>	C14H26O2
<b>SMILES:</b>	O=C1CCCCCCCCCCCCCO1
<b>Mol. weight [g/mol]:</b>	226.35
<b>CAS:</b>	3537-83-5

## Physical Properties

Property code	Value	Unit	Source
gf	-218.45	kJ/mol	Joback Method
hf	-582.77	kJ/mol	Joback Method
hfus	11.37	kJ/mol	Joback Method
hvap	57.80	kJ/mol	Joback Method
log10ws	-4.44		Crippen Method
logp	4.224		Crippen Method
mcvol	204.700	ml/mol	McGowan Method
pc	2327.03	kPa	Joback Method
rinpol	1744.00		NIST Webbook
rinpol	1727.00		NIST Webbook
rinpol	1727.00		NIST Webbook
rinpol	1744.00		NIST Webbook
ripol	2132.00		NIST Webbook
tb	677.14	K	Joback Method
tc	943.06	K	Joback Method
tf	322.27	K	Joback Method
vc	0.710	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	603.11	J/molxK	677.14	Joback Method

cpg	632.22	J/mol×K	721.46	Joback Method
cpg	658.87	J/mol×K	765.78	Joback Method
cpg	682.96	J/mol×K	810.10	Joback Method
cpg	704.38	J/mol×K	854.42	Joback Method
cpg	723.03	J/mol×K	898.74	Joback Method
cpg	738.80	J/mol×K	943.06	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C3537835&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C3537835&amp;Units=SI</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>ripol:</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

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