

# 5-Methyl-5-decanolide

<b>Inchi:</b>	InChI=1S/C11H20O2/c1-3-4-5-8-11(2)9-6-7-10(12)13-11/h3-9H2,1-2H3
<b>InchiKey:</b>	WCMVKHVJODVJSI-UHFFFAOYSA-N
<b>Formula:</b>	C11H20O2
<b>SMILES:</b>	CCCCC1(C)CCCC(=O)O1
<b>Mol. weight [g/mol]:</b>	184.28

## Physical Properties

Property code	Value	Unit	Source
gf	-148.01	kJ/mol	Joback Method
hf	-470.51	kJ/mol	Joback Method
hfus	17.27	kJ/mol	Joback Method
hvap	48.11	kJ/mol	Joback Method
log10ws	-3.30		Crippen Method
logp	3.053		Crippen Method
mcvol	162.430	ml/mol	McGowan Method
pc	2505.01	kPa	Joback Method
rinpol	1458.00		NIST Webbook
ripol	2155.00		NIST Webbook
tb	565.64	K	Joback Method
tc	782.37	K	Joback Method
tf	339.80	K	Joback Method
vc	0.611	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	419.25	J/mol×K	565.64	Joback Method
cpg	437.96	J/mol×K	601.76	Joback Method
cpg	455.68	J/mol×K	637.88	Joback Method
cpg	472.50	J/mol×K	674.00	Joback Method
cpg	488.50	J/mol×K	710.12	Joback Method
cpg	503.78	J/mol×K	746.24	Joback Method
cpg	518.41	J/mol×K	782.37	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R434756&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R434756&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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