

# 1,3-Dioxolane, 2-methyl-2-propyl-

<b>Other names:</b>	2-Pentanone, cyclic 1,2-ethanediyl acetal 2-Methyl-2-propyl-1,3-dioxolane
<b>Inchi:</b>	InChI=1S/C7H14O2/c1-3-4-7(2)8-5-6-9-7/h3-6H2,1-2H3
<b>InchiKey:</b>	NXGWCOIWOMWSDT-UHFFFAOYSA-N
<b>Formula:</b>	C7H14O2
<b>SMILES:</b>	CCCC1(C)OCCO1
<b>Mol. weight [g/mol]:</b>	130.18
<b>CAS:</b>	4352-98-1

## Physical Properties

Property code	Value	Unit	Source
gf	-133.12	kJ/mol	Joback Method
hf	-376.09	kJ/mol	Joback Method
hfus	17.48	kJ/mol	Joback Method
hvap	46.30 ± 0.30	kJ/mol	NIST Webbook
log10ws	-1.43		Crippen Method
logp	1.550		Crippen Method
mvol	110.370	ml/mol	McGowan Method
pc	3530.46	kPa	Joback Method
tb	428.98	K	Joback Method
tc	632.81	K	Joback Method
tf	256.59	K	Joback Method
vc	0.408	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	235.68	J/mol×K	428.98	Joback Method
cpg	250.57	J/mol×K	462.95	Joback Method
cpg	264.43	J/mol×K	496.92	Joback Method
cpg	277.36	J/mol×K	530.89	Joback Method
cpg	289.44	J/mol×K	564.86	Joback Method
cpg	300.78	J/mol×K	598.84	Joback Method
cpg	311.46	J/mol×K	632.81	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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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=C4352981&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C4352981&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>h vap:</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>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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