

# 1-Decen-3-one

<b>Inchi:</b>	InChI=1S/C10H18O/c1-3-5-6-7-8-9-10(11)4-2/h4H,2-3,5-9H2,1H3
<b>InchiKey:</b>	XTDXBZMKUMZNMH-UHFFFAOYSA-N
<b>Formula:</b>	C10H18O
<b>SMILES:</b>	C=CC(=O)CCCCCCC
<b>Mol. weight [g/mol]:</b>	154.25
<b>CAS:</b>	56606-79-2

## Physical Properties

Property code	Value	Unit	Source
gf	-7.76	kJ/mol	Joback Method
hf	-236.88	kJ/mol	Joback Method
hfus	21.98	kJ/mol	Joback Method
hvap	43.93	kJ/mol	Joback Method
log10ws	-3.14		Crippen Method
logp	3.102		Crippen Method
mcvol	149.030	ml/mol	McGowan Method
pc	2327.03	kPa	Joback Method
ripol	1485.00		NIST Webbook
ripol	1485.00		NIST Webbook
tb	478.75	K	Joback Method
tc	654.86	K	Joback Method
tf	250.63	K	Joback Method
vc	0.583	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	324.38	J/mol×K	478.75	Joback Method
cpg	338.27	J/mol×K	508.10	Joback Method
cpg	351.56	J/mol×K	537.45	Joback Method
cpg	364.27	J/mol×K	566.80	Joback Method
cpg	376.41	J/mol×K	596.16	Joback Method
cpg	388.01	J/mol×K	625.51	Joback Method
cpg	399.09	J/mol×K	654.86	Joback Method

dvisc	0.0041298	Paxs	250.63	Joback Method
dvisc	0.0019446	Paxs	288.65	Joback Method
dvisc	0.0010912	Paxs	326.67	Joback Method
dvisc	0.0006907	Paxs	364.69	Joback Method
dvisc	0.0004766	Paxs	402.71	Joback Method
dvisc	0.0003506	Paxs	440.73	Joback Method
dvisc	0.0002708	Paxs	478.75	Joback Method

## Sources

<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=C56606792&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C56606792&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>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<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>	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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