

# 5-Octadecenal

<b>Inchi:</b>	InChI=1S/C18H34O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19/h13-14,18H,2-12
<b>InchiKey:</b>	MCCQBYWXEBKFOS-BUHFOSPRSA-N
<b>Formula:</b>	C18H34O
<b>SMILES:</b>	CCCCCCCCCCCC=CCCC=O
<b>Mol. weight [g/mol]:</b>	266.46
<b>CAS:</b>	56554-88-2

## Physical Properties

Property code	Value	Unit	Source
gf	81.38	kJ/mol	Joback Method
hf	-383.21	kJ/mol	Joback Method
hfus	44.87	kJ/mol	Joback Method
hvap	62.34	kJ/mol	Joback Method
log10ws	-6.49		Crippen Method
logp	6.223		Crippen Method
mcvol	261.750	ml/mol	McGowan Method
pc	1257.48	kPa	Joback Method
tb	664.06	K	Joback Method
tc	833.01	K	Joback Method
tf	329.54	K	Joback Method
vc	1.040	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	735.71	J/molxK	664.06	Joback Method
cpg	754.04	J/molxK	692.22	Joback Method
cpg	771.55	J/molxK	720.38	Joback Method
cpg	788.27	J/molxK	748.54	Joback Method
cpg	804.25	J/molxK	776.70	Joback Method
cpg	819.50	J/molxK	804.85	Joback Method
cpg	834.07	J/molxK	833.01	Joback Method
dvisc	0.0032761	Paxs	329.54	Joback Method
dvisc	0.0012611	Paxs	385.29	Joback Method

dvisc	0.0006179	Paxs	441.05	Joback Method
dvisc	0.0003554	Paxs	496.80	Joback Method
dvisc	0.0002285	Paxs	552.55	Joback Method
dvisc	0.0001593	Paxs	608.31	Joback Method
dvisc	0.0001180	Paxs	664.06	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=C56554882&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C56554882&amp;Units=SI</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>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/25-598-1/5-Octadecenal.pdf>

Generated by Cheméo on 2024-05-19 04:14:03.116587045 +0000 UTC m=+18381292.037164357.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.