

# 3-Octadecene, (E)-

<b>Other names:</b>	(3E)-3-Octadecene (E)-3-Octadecene trans-3-Octadecene
<b>Inchi:</b>	InChI=1S/C18H36/c1-3-5-7-9-11-13-15-17-18-16-14-12-10-8-6-4-2/h5,7H,3-4,6,8-18H2,1
<b>InchiKey:</b>	OCKCCFAPMYQFLZ-FNORWQNLSA-N
<b>Formula:</b>	C18H36
<b>SMILES:</b>	CCC=CCCCCCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	252.48
<b>CAS:</b>	7206-19-1

## Physical Properties

Property code	Value	Unit	Source
gf	180.90	kJ/mol	Joback Method
hf	-297.63	kJ/mol	Joback Method
hfus	42.58	kJ/mol	Joback Method
hvap	55.62	kJ/mol	Joback Method
log10ws	-7.21		Crippen Method
logp	7.044		Crippen Method
mcvol	260.180	ml/mol	McGowan Method
pc	1194.00	kPa	Joback Method
rinpol	1784.70		NIST Webbook
rinpol	1785.30		NIST Webbook
rinpol	1795.00		NIST Webbook
ripol	1896.00		NIST Webbook
ripol	1896.00		NIST Webbook
tb	615.40	K	Joback Method
tc	779.04	K	Joback Method
tf	283.40 ± 2.00	K	NIST Webbook
vc	1.024	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	704.15	J/mol×K	615.40	Joback Method

cpg	723.88	J/molxK	642.67	Joback Method
cpg	742.80	J/molxK	669.95	Joback Method
cpg	760.91	J/molxK	697.22	Joback Method
cpg	778.26	J/molxK	724.50	Joback Method
cpg	794.87	J/molxK	751.77	Joback Method
cpg	810.77	J/molxK	779.04	Joback Method
dvisc	0.0041393	Paxs	287.54	Joback Method
dvisc	0.0013772	Paxs	342.18	Joback Method
dvisc	0.0006204	Paxs	396.83	Joback Method
dvisc	0.0003390	Paxs	451.47	Joback Method
dvisc	0.0002111	Paxs	506.11	Joback Method
dvisc	0.0001441	Paxs	560.76	Joback Method
dvisc	0.0001053	Paxs	615.40	Joback Method

## Sources

<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=C7206191&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C7206191&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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>

## 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>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature

**tf:** Normal melting (fusion) point

**vc:** Critical Volume

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