

# 4-Octenoic acid, ethyl ester, (Z)-

<b>Other names:</b>	Ethyl cis-4-octenoate Ethyl (4Z)-4-octenoate Ethyl 4-octenoate, (Z)- Ethyl (Z)-4-octenoate ( Z)-Ethyl 4-octenoate ethyl (Z)-oct-4-enoate
<b>Inchi:</b>	InChI=1S/C10H18O2/c1-3-5-6-7-8-9-10(11)12-4-2/h6-7H,3-5,8-9H2,1-2H3/b7-6-
<b>InchiKey:</b>	WRUZCQAJIHSQPL-SREVYHEPSA-N
<b>Formula:</b>	C10H18O2
<b>SMILES:</b>	CCCC=CCCC(=O)OCC
<b>Mol. weight [g/mol]:</b>	170.25
<b>CAS:</b>	34495-71-1

## Physical Properties

Property code	Value	Unit	Source
gf	-120.38	kJ/mol	Joback Method
hf	-377.31	kJ/mol	Joback Method
hfus	24.64	kJ/mol	Joback Method
hvap	46.97	kJ/mol	Joback Method
log10ws	-2.72		Crippen Method
logp	2.686		Crippen Method
mcvol	154.900	ml/mol	McGowan Method
pc	2311.39	kPa	Joback Method
rinpol	1187.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1173.00		NIST Webbook
rinpol	1167.00		NIST Webbook
rinpol	1164.00		NIST Webbook
tb	508.65	K	Joback Method
tc	688.43	K	Joback Method
tf	269.54	K	Joback Method
vc	0.600	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.74	J/molxK	508.65	Joback Method
cpg	414.10	J/molxK	658.47	Joback Method
cpg	402.54	J/molxK	628.50	Joback Method
cpg	390.44	J/molxK	598.54	Joback Method
cpg	377.79	J/molxK	568.58	Joback Method
cpg	364.56	J/molxK	538.61	Joback Method
cpg	425.13	J/molxK	688.43	Joback Method
dvisc	0.0001880	Paxs	508.65	Joback Method
dvisc	0.0002455	Paxs	468.80	Joback Method
dvisc	0.0003369	Paxs	428.95	Joback Method
dvisc	0.0004933	Paxs	389.10	Joback Method
dvisc	0.0007878	Paxs	349.24	Joback Method
dvisc	0.0014196	Paxs	309.39	Joback Method
dvisc	0.0030444	Paxs	269.54	Joback Method

## Sources

<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=C34495711&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C34495711&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>

## 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>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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