

# Docosanoic acid hexadec-7-enyl ester, Z

<b>Inchi:</b>	InChI=1S/C38H74O2/c1-3-5-7-9-11-13-15-17-19-20-21-22-23-24-26-28-30-32-34-36-38(
<b>InchiKey:</b>	WWMRJCLIXZGJRE-XIEYBQDHSA-N
<b>Formula:</b>	C38H74O2
<b>SMILES:</b>	CCCCCCCC=CCCCCCCOC(=O)CCCCCCCCCCCCCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	562.99

## Physical Properties

Property code	Value	Unit	Source
gf	115.38	kJ/mol	Joback Method
hf	-955.23	kJ/mol	Joback Method
hfus	97.17	kJ/mol	Joback Method
hvap	109.30	kJ/mol	Joback Method
log10ws	-14.45		Crippen Method
logp	13.609		Crippen Method
mcvol	549.420	ml/mol	McGowan Method
pc	439.87	kPa	Joback Method
rinpol	3931.84		NIST Webbook
tb	1149.29	K	Joback Method
tc	1523.64	K	Joback Method
tf	585.10	K	Joback Method
vc	2.167	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2064.62	J/molxK	1149.29	Joback Method
cpg	2102.17	J/molxK	1211.68	Joback Method
cpg	2136.19	J/molxK	1274.07	Joback Method
cpg	2167.30	J/molxK	1336.46	Joback Method
cpg	2196.10	J/molxK	1398.86	Joback Method
cpg	2223.22	J/molxK	1461.25	Joback Method
cpg	2249.29	J/molxK	1523.64	Joback Method
dvisc	0.0001421	Paxs	585.10	Joback Method
dvisc	0.0000522	Paxs	679.13	Joback Method

dvisc	0.0000245	Paxs	773.16	Joback Method
dvisc	0.0000135	Paxs	867.19	Joback Method
dvisc	0.0000084	Paxs	961.23	Joback Method
dvisc	0.0000057	Paxs	1055.26	Joback Method
dvisc	0.0000041	Paxs	1149.29	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R436856&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R436856&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>
<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>

## 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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