

# Acetic acid, 3,7,11,15-tetramethyl-hexadecyl ester

Other names:	3,7,11,15-Tetramethyl-hexadecyl acetate
Inchi:	InChI=1S/C22H44O2/c1-18(2)10-7-11-19(3)12-8-13-20(4)14-9-15-21(5)16-17-24-22(6)23
InchiKey:	QSEOJZDSLREMLU-UHFFFAOYSA-N
Formula:	C22H44O2
SMILES:	CC(=O)OCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]:	340.58

## Physical Properties

Property code	Value	Unit	Source
gf	-109.32	kJ/mol	Joback Method
hf	-763.33	kJ/mol	Joback Method
hfus	41.43	kJ/mol	Joback Method
hvap	72.17	kJ/mol	Joback Method
log10ws	-6.93		Crippen Method
logp	7.015		Crippen Method
mvol	328.280	ml/mol	McGowan Method
pc	945.58	kPa	Joback Method
tb	777.29	K	Joback Method
tc	957.30	K	Joback Method
tf	349.86	K	Joback Method
vc	1.268	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1032.75	J/molxK	777.29	Joback Method
cpg	1053.78	J/molxK	807.29	Joback Method
cpg	1073.71	J/molxK	837.29	Joback Method
cpg	1092.57	J/molxK	867.29	Joback Method
cpg	1110.40	J/molxK	897.30	Joback Method
cpg	1127.22	J/molxK	927.30	Joback Method
cpg	1143.07	J/molxK	957.30	Joback Method
dvisc	0.0038145	Paxs	349.86	Joback Method
dvisc	0.0009378	Paxs	421.10	Joback Method

dvisc	0.0003460	Paxs	492.34	Joback Method
dvisc	0.0001643	Paxs	563.58	Joback Method
dvisc	0.0000922	Paxs	634.81	Joback Method
dvisc	0.0000581	Paxs	706.05	Joback Method
dvisc	0.0000399	Paxs	777.29	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=U193630&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U193630&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>mccvol:</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

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