

# Hexadecanoic acid, 15-hydroxy-, methyl ester

<b>Other names:</b>	15-Hydroxyhexadecanoic acid, methyl ester
<b>Inchi:</b>	InChI=1S/C17H34O3/c1-16(18)14-12-10-8-6-4-3-5-7-9-11-13-15-17(19)20-2/h16,18H,3-
<b>InchiKey:</b>	JWWZZYAUHBAGBD-UHFFFAOYSA-N
<b>Formula:</b>	C17H34O3
<b>SMILES:</b>	COC(=O)CCCCCCCCCCCCCCC(C)O
<b>Mol. weight [g/mol]:</b>	286.45
<b>CAS:</b>	55823-13-7

## Physical Properties

Property code	Value	Unit	Source
gf	-280.92	kJ/mol	Joback Method
hf	-796.52	kJ/mol	Joback Method
hfus	43.14	kJ/mol	Joback Method
hvap	78.88	kJ/mol	Joback Method
log10ws	-5.18		Crippen Method
logp	4.612		Crippen Method
mcvol	263.700	ml/mol	McGowan Method
pc	1367.69	kPa	Joback Method
tb	756.39	K	Joback Method
tc	930.60	K	Joback Method
tf	399.33	K	Joback Method
vc	1.024	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	808.17	J/mol×K	756.39	Joback Method
cpg	882.98	J/mol×K	901.56	Joback Method
cpg	869.56	J/mol×K	872.53	Joback Method
cpg	855.40	J/mol×K	843.49	Joback Method
cpg	840.45	J/mol×K	814.46	Joback Method
cpg	824.72	J/mol×K	785.42	Joback Method
cpg	895.65	J/mol×K	930.60	Joback Method
dvisc	0.0000196	Paxs	756.39	Joback Method

dvisc	0.0000310	Paxs	696.88	Joback Method
dvisc	0.0000532	Paxs	637.37	Joback Method
dvisc	0.0001021	Paxs	577.86	Joback Method
dvisc	0.0002277	Paxs	518.35	Joback Method
dvisc	0.0006252	Paxs	458.84	Joback Method
dvisc	0.0023196	Paxs	399.33	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C55823137&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C55823137&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>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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