

# Nonanoic acid, 9-hydroxy-, methyl ester

<b>Other names:</b>	methyl 9-hydroxynonanoate
<b>Inchi:</b>	InChI=1S/C10H20O3/c1-13-10(12)8-6-4-2-3-5-7-9-11/h11H,2-9H2,1H3
<b>InchiKey:</b>	RIZOOQYPYGPBOC-UHFFFAOYSA-N
<b>Formula:</b>	C10H20O3
<b>SMILES:</b>	COC(=O)CCCCCCCCO
<b>Mol. weight [g/mol]:</b>	188.26
<b>CAS:</b>	34957-73-8

## Physical Properties

Property code	Value	Unit	Source
gf	-337.42	kJ/mol	Joback Method
hf	-646.76	kJ/mol	Joback Method
hfus	28.53	kJ/mol	Joback Method
hvap	63.69	kJ/mol	Joback Method
log10ws	-2.13		Crippen Method
logp	1.882		Crippen Method
mcvol	165.070	ml/mol	McGowan Method
pc	2402.92	kPa	Joback Method
tb	596.67	K	Joback Method
tc	763.64	K	Joback Method
tf	335.44	K	Joback Method
vc	0.638	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	428.51	J/mol×K	596.67	Joback Method
cpg	440.83	J/mol×K	624.50	Joback Method
cpg	452.65	J/mol×K	652.33	Joback Method
cpg	463.99	J/mol×K	680.16	Joback Method
cpg	474.85	J/mol×K	707.98	Joback Method
cpg	485.23	J/mol×K	735.81	Joback Method
cpg	495.14	J/mol×K	763.64	Joback Method
dvisc	0.0060280	Paxs	335.44	Joback Method

dvisc	0.0019204	Paxs	378.98	Joback Method
dvisc	0.0007745	Paxs	422.52	Joback Method
dvisc	0.0003701	Paxs	466.05	Joback Method
dvisc	0.0002006	Paxs	509.59	Joback Method
dvisc	0.0001198	Paxs	553.13	Joback Method
dvisc	0.0000771	Paxs	596.67	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C34957738&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C34957738&amp;Units=SI</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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