

# 13-Hydroxytridecanoic acid

<b>Inchi:</b>	InChI=1S/C13H26O3/c14-12-10-8-6-4-2-1-3-5-7-9-11-13(15)16/h14H,1-12H2,(H,15,16)
<b>InchiKey:</b>	DWXOPJCPYKBNEC-UHFFFAOYSA-N
<b>Formula:</b>	C13H26O3
<b>SMILES:</b>	O=C(O)CCCCCCCCCCCCO
<b>Mol. weight [g/mol]:</b>	230.34
<b>CAS:</b>	7735-38-8

## Physical Properties

Property code	Value	Unit	Source
gf	-343.98	kJ/mol	Joback Method
hf	-728.69	kJ/mol	Joback Method
hfs	-979.00 ± 3.00	kJ/mol	NIST Webbook
hfus	39.20	kJ/mol	Joback Method
hvap	84.64	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	3.354		Crippen Method
mcvol	207.340	ml/mol	McGowan Method
pc	2030.89	kPa	Joback Method
tb	735.07	K	Joback Method
tc	905.29	K	Joback Method
tf	407.84	K	Joback Method
vc	0.807	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	618.20	J/molxK	735.07	Joback Method
cpg	631.00	J/molxK	763.44	Joback Method
cpg	643.20	J/molxK	791.81	Joback Method
cpg	654.82	J/molxK	820.18	Joback Method
cpg	665.88	J/molxK	848.55	Joback Method
cpg	676.40	J/molxK	876.92	Joback Method
cpg	686.41	J/molxK	905.29	Joback Method
dvisc	0.0029809	Paxs	407.84	Joback Method

dvisc	0.0006587	Paxs	462.38	Joback Method
dvisc	0.0002002	Paxs	516.92	Joback Method
dvisc	0.0000764	Paxs	571.45	Joback Method
dvisc	0.0000345	Paxs	625.99	Joback Method
dvisc	0.0000177	Paxs	680.53	Joback Method
dvisc	0.0000100	Paxs	735.07	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=C7735388&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C7735388&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>hfs:</b>	Solid phase 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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