

# Glutaric acid, ethyl undecyl ester

**Inchi:** InChI=1S/C18H34O4/c1-3-5-6-7-8-9-10-11-12-16-22-18(20)15-13-14-17(19)21-4-2/h3-16  
**InchiKey:** DGZSXWFJDYSWIF-UHFFFAOYSA-N  
**Formula:** C18H34O4  
**SMILES:** CCCCCCCCCCOC(=O)CCCC(=O)OCC  
**Mol. weight [g/mol]:** 314.46

## Physical Properties

Property code	Value	Unit	Source
gf	-367.16	kJ/mol	Joback Method
hf	-904.45	kJ/mol	Joback Method
hfus	47.95	kJ/mol	Joback Method
hvap	73.97	kJ/mol	Joback Method
log10ws	-5.08		Crippen Method
logp	4.794		Crippen Method
mcvol	279.360	ml/mol	McGowan Method
pc	1227.70	kPa	Joback Method
rinpol	2207.00		NIST Webbook
rinpol	2207.00		NIST Webbook
rinpol	2213.00		NIST Webbook
tb	763.82	K	Joback Method
tc	942.53	K	Joback Method
tf	436.94	K	Joback Method
vc	1.091	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	849.49	J/molxK	763.82	Joback Method
cpg	866.90	J/molxK	793.61	Joback Method
cpg	883.40	J/molxK	823.39	Joback Method
cpg	898.98	J/molxK	853.18	Joback Method
cpg	913.68	J/molxK	882.96	Joback Method
cpg	927.49	J/molxK	912.75	Joback Method
cpg	940.44	J/molxK	942.53	Joback Method

dvisc	0.0010365	Paxs	436.94	Joback Method
dvisc	0.0005169	Paxs	491.42	Joback Method
dvisc	0.0002962	Paxs	545.90	Joback Method
dvisc	0.0001878	Paxs	600.38	Joback Method
dvisc	0.0001284	Paxs	654.86	Joback Method
dvisc	0.0000931	Paxs	709.34	Joback Method
dvisc	0.0000707	Paxs	763.82	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=U360003&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U360003&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>mvol:</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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