

# Glutaric acid, 4-methylhept-3-yl tetradecyl ester

Inchi:	InChI=1S/C27H52O4/c1-5-8-9-10-11-12-13-14-15-16-17-18-23-30-26(28)21-19-22-27(29)
InchiKey:	LDLHAJVGSNMMAQ-UHFFFAOYSA-N
Formula:	C27H52O4
SMILES:	CCCCCCCCCCCCCOC(=O)CCCC(=O)OC(CC)C(C)CCC
Mol. weight [g/mol]:	440.70

## Physical Properties

Property code	Value	Unit	Source
gf	-296.26	kJ/mol	Joback Method
hf	-1100.77	kJ/mol	Joback Method
hfus	64.21	kJ/mol	Joback Method
hvap	93.23	kJ/mol	Joback Method
log10ws	-8.72		Crippen Method
logp	8.159		Crippen Method
mcvol	406.170	ml/mol	McGowan Method
pc	729.67	kPa	Joback Method
rinpola	2963.00		NIST Webbook
tb	968.86	K	Joback Method
tc	1194.47	K	Joback Method
tf	508.37	K	Joback Method
vc	1.583	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1410.37	J/molxK	968.86	Joback Method
cpg	1431.98	J/molxK	1006.46	Joback Method
cpg	1451.77	J/molxK	1044.06	Joback Method
cpg	1469.79	J/molxK	1081.67	Joback Method
cpg	1486.11	J/molxK	1119.27	Joback Method
cpg	1500.78	J/molxK	1156.87	Joback Method
cpg	1513.86	J/molxK	1194.47	Joback Method
dvisc	0.0004716	Paxs	508.37	Joback Method
dvisc	0.0001832	Paxs	585.12	Joback Method

dvisc	0.0000886	Paxs	661.87	Joback Method
dvisc	0.0000498	Paxs	738.62	Joback Method
dvisc	0.0000312	Paxs	815.36	Joback Method
dvisc	0.0000212	Paxs	892.11	Joback Method
dvisc	0.0000153	Paxs	968.86	Joback Method

## Sources

<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=U377162&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U377162&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>

## 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>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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