

# Glutaric acid, butyl decyl ester

<b>Inchi:</b>	InChI=1S/C19H36O4/c1-3-5-7-8-9-10-11-12-17-23-19(21)15-13-14-18(20)22-16-6-4-2/h3
<b>InchiKey:</b>	VNBXKIUYZKQXSZ-UHFFFAOYSA-N
<b>Formula:</b>	C19H36O4
<b>SMILES:</b>	CCCCCCCCCOC(=O)CCCC(=O)OCCCC
<b>Mol. weight [g/mol]:</b>	328.49

## Physical Properties

Property code	Value	Unit	Source
gf	-358.74	kJ/mol	Joback Method
hf	-925.09	kJ/mol	Joback Method
hfus	50.54	kJ/mol	Joback Method
hvap	76.20	kJ/mol	Joback Method
log10ws	-5.50		Crippen Method
logp	5.184		Crippen Method
mvol	293.450	ml/mol	McGowan Method
pc	1149.10	kPa	Joback Method
rinpol	2300.00		NIST Webbook
rinpol	2300.00		NIST Webbook
tb	786.70	K	Joback Method
tc	967.58	K	Joback Method
tf	448.21	K	Joback Method
vc	1.147	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	908.90	J/molxK	786.70	Joback Method
cpg	988.43	J/molxK	937.43	Joback Method
cpg	974.42	J/molxK	907.29	Joback Method
cpg	959.47	J/molxK	877.14	Joback Method
cpg	943.58	J/molxK	846.99	Joback Method
cpg	926.73	J/molxK	816.85	Joback Method
cpg	1001.52	J/molxK	967.58	Joback Method
dvisc	0.0000614	Paxs	786.70	Joback Method

dvisc	0.0000812	Paxs	730.29	Joback Method
dvisc	0.0001123	Paxs	673.87	Joback Method
dvisc	0.0001650	Paxs	617.46	Joback Method
dvisc	0.0002619	Paxs	561.04	Joback Method
dvisc	0.0004609	Paxs	504.63	Joback Method
dvisc	0.0009350	Paxs	448.21	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=U358269&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U358269&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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