

# Glutaric acid, dodecyl 2-naphthyl ester

<b>Inchi:</b>	InChI=1S/C27H38O4/c1-2-3-4-5-6-7-8-9-10-13-21-30-26(28)17-14-18-27(29)31-25-20-19
<b>InchiKey:</b>	HEXFNHUMVLMCRX-UHFFFAOYSA-N
<b>Formula:</b>	C27H38O4
<b>SMILES:</b>	CCCCCCCCCCCCOC(=O)CCCC(=O)Oc1ccc2ccccc2c1
<b>Mol. weight [g/mol]:</b>	426.59

## Physical Properties

Property code	Value	Unit	Source
gf	-81.95	kJ/mol	Joback Method
hf	-674.08	kJ/mol	Joback Method
hfus	61.93	kJ/mol	Joback Method
hvap	98.59	kJ/mol	Joback Method
log10ws	-8.73		Crippen Method
logp	7.380		Crippen Method
mcvol	362.950	ml/mol	McGowan Method
pc	1003.35	kPa	Joback Method
rinpol	3496.00		NIST Webbook
tb	1020.38	K	Joback Method
tc	1249.29	K	Joback Method
tf	610.01	K	Joback Method
vc	1.409	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1224.22	J/molxK	1020.38	Joback Method
cpg	1293.34	J/molxK	1211.14	Joback Method
cpg	1281.77	J/molxK	1172.99	Joback Method
cpg	1269.16	J/molxK	1134.83	Joback Method
cpg	1255.43	J/molxK	1096.68	Joback Method
cpg	1240.48	J/molxK	1058.53	Joback Method
cpg	1303.96	J/molxK	1249.29	Joback Method
dvisc	0.0000414	Paxs	1020.38	Joback Method
dvisc	0.0000521	Paxs	951.98	Joback Method

dvisc	0.0000680	Paxs	883.59	Joback Method
dvisc	0.0000928	Paxs	815.19	Joback Method
dvisc	0.0001341	Paxs	746.80	Joback Method
dvisc	0.0002086	Paxs	678.40	Joback Method
dvisc	0.0003583	Paxs	610.01	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=U358788&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U358788&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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