

# Glutaric acid, dodecyl pent-4-enyl ester

<b>Inchi:</b>	InChI=1S/C22H40O4/c1-3-5-7-8-9-10-11-12-13-15-20-26-22(24)18-16-17-21(23)25-19-1
<b>InchiKey:</b>	ZCEVPOWYTYTVGRQ-UHFFFAOYSA-N
<b>Formula:</b>	C22H40O4
<b>SMILES:</b>	C=CCCCOC(=O)CCCC(=O)OCCCCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	368.55

## Physical Properties

Property code	Value	Unit	Source
gf	-245.64	kJ/mol	Joback Method
hf	-861.58	kJ/mol	Joback Method
hfus	57.03	kJ/mol	Joback Method
hvap	82.21	kJ/mol	Joback Method
log10ws	-6.61		Crippen Method
logp	6.130		Crippen Method
mcvol	331.420	ml/mol	McGowan Method
pc	979.01	kPa	Joback Method
rinpola	2609.00		NIST Webbook
tb	852.02	K	Joback Method
tc	1043.34	K	Joback Method
tf	480.26	K	Joback Method
vc	1.296	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1064.09	J/molxK	852.02	Joback Method
cpg	1145.82	J/molxK	1011.45	Joback Method
cpg	1131.66	J/molxK	979.56	Joback Method
cpg	1116.44	J/molxK	947.68	Joback Method
cpg	1100.12	J/molxK	915.79	Joback Method
cpg	1082.68	J/molxK	883.91	Joback Method
cpg	1158.94	J/molxK	1043.34	Joback Method
dvisc	0.0000426	Paxs	852.02	Joback Method
dvisc	0.0000564	Paxs	790.06	Joback Method

dvisc	0.0000784	Paxs	728.10	Joback Method
dvisc	0.0001158	Paxs	666.14	Joback Method
dvisc	0.0001853	Paxs	604.18	Joback Method
dvisc	0.0003301	Paxs	542.22	Joback Method
dvisc	0.0006825	Paxs	480.26	Joback Method

## Sources

<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=U359991&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U359991&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</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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