

# Glutaric acid, oct-1-en-3-yl hept-2-yl ester

<b>Inchi:</b>	InChI=1S/C20H36O4/c1-5-8-10-13-17(4)23-19(21)15-12-16-20(22)24-18(7-3)14-11-9-6-2
<b>InchiKey:</b>	KGOYHLKUHSQSLT-UHFFFAOYSA-N
<b>Formula:</b>	C20H36O4
<b>SMILES:</b>	<chem>C=CC(CCCCC)OC(=O)CCCC(=O)OC(C)CCCC</chem>
<b>Mol. weight [g/mol]:</b>	340.50

## Physical Properties

Property code	Value	Unit	Source
gf	-267.36	kJ/mol	Joback Method
hf	-830.86	kJ/mol	Joback Method
hfus	44.80	kJ/mol	Joback Method
hvap	76.98	kJ/mol	Joback Method
log10ws	-6.00		Crippen Method
logp	5.347		Crippen Method
mcvol	303.240	ml/mol	McGowan Method
pc	1120.05	kPa	Joback Method
rinpol	2114.00		NIST Webbook
rinpol	2114.00		NIST Webbook
tb	805.38	K	Joback Method
tc	991.25	K	Joback Method
tf	427.72	K	Joback Method
vc	1.173	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	943.22	J/molxK	805.38	Joback Method
cpg	961.10	J/molxK	836.36	Joback Method
cpg	977.95	J/molxK	867.34	Joback Method
cpg	993.77	J/molxK	898.31	Joback Method
cpg	1008.58	J/molxK	929.29	Joback Method
cpg	1022.42	J/molxK	960.27	Joback Method
cpg	1035.29	J/molxK	991.25	Joback Method
dvisc	0.0012049	Paxs	427.72	Joback Method

dvisc	0.0004988	Paxs	490.66	Joback Method
dvisc	0.0002523	Paxs	553.61	Joback Method
dvisc	0.0001467	Paxs	616.55	Joback Method
dvisc	0.0000943	Paxs	679.49	Joback Method
dvisc	0.0000654	Paxs	742.44	Joback Method
dvisc	0.0000480	Paxs	805.38	Joback Method

## Sources

<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=U405350&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405350&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>

## 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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