

# Glutaric acid, 2-(cyclohexyl)ethyl hept-2-yl ester

Inchi:	InChI=1S/C20H36O4/c1-3-4-6-10-17(2)24-20(22)14-9-13-19(21)23-16-15-18-11-7-5-8-12
InchiKey:	OUFIBLFCUCUEO-UHFFFAOYSA-N
Formula:	C20H36O4
SMILES:	CCCCC(C)OC(=O)CCCC(=O)OCCC1CCCCC1
Mol. weight [g/mol]:	340.50

## Physical Properties

Property code	Value	Unit	Source
gf	-328.31	kJ/mol	Joback Method
hf	-896.69	kJ/mol	Joback Method
hfus	41.44	kJ/mol	Joback Method
hvap	78.47	kJ/mol	Joback Method
log10ws	-5.68		Crippen Method
logp	5.182		Crippen Method
mvol	296.680	ml/mol	McGowan Method
pc	1245.97	kPa	Joback Method
rinpol	2289.00		NIST Webbook
rinpol	2289.00		NIST Webbook
tb	828.69	K	Joback Method
tc	1026.13	K	Joback Method
tf	451.86	K	Joback Method
vc	1.131	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	966.84	J/molxK	828.69	Joback Method
cpg	985.88	J/molxK	861.60	Joback Method
cpg	1003.60	J/molxK	894.50	Joback Method
cpg	1020.03	J/molxK	927.41	Joback Method
cpg	1035.18	J/molxK	960.31	Joback Method
cpg	1049.09	J/molxK	993.22	Joback Method
cpg	1061.76	J/molxK	1026.13	Joback Method
dvisc	0.0011350	Paxs	451.86	Joback Method

dvisc	0.0004924	Paxs	514.66	Joback Method
dvisc	0.0002562	Paxs	577.47	Joback Method
dvisc	0.0001515	Paxs	640.27	Joback Method
dvisc	0.0000984	Paxs	703.08	Joback Method
dvisc	0.0000686	Paxs	765.88	Joback Method
dvisc	0.0000505	Paxs	828.69	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U405418&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405418&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>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</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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