

# Succinic acid, cyclohexylmethyl 4-heptyl ester

**Inchi:** InChI=1S/C18H32O4/c1-3-8-16(9-4-2)22-18(20)13-12-17(19)21-14-15-10-6-5-7-11-15/h1-18  
**InchiKey:** QVQHSCOVJRZHLG-UHFFFAOYSA-N  
**Formula:** C18H32O4  
**SMILES:** CCCC(CCC)OC(=O)CCC(=O)OCC1CCCCC1  
**Mol. weight [g/mol]:** 312.44

## Physical Properties

Property code	Value	Unit	Source
gf	-345.15	kJ/mol	Joback Method
hf	-855.41	kJ/mol	Joback Method
hfus	36.26	kJ/mol	Joback Method
hvap	74.02	kJ/mol	Joback Method
log10ws	-4.85		Crippen Method
logp	4.402		Crippen Method
mvol	268.500	ml/mol	McGowan Method
pc	1433.72	kPa	Joback Method
rinpol	2109.00		NIST Webbook
rinpol	2109.00		NIST Webbook
tb	782.93	K	Joback Method
tc	980.01	K	Joback Method
tf	429.32	K	Joback Method
vc	1.018	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	846.45	J/molxK	782.93	Joback Method
cpg	865.30	J/molxK	815.78	Joback Method
cpg	882.92	J/molxK	848.62	Joback Method
cpg	899.31	J/molxK	881.47	Joback Method
cpg	914.51	J/molxK	914.31	Joback Method
cpg	928.52	J/molxK	947.16	Joback Method
cpg	941.36	J/molxK	980.01	Joback Method
dvisc	0.0014323	Paxs	429.32	Joback Method

dvisc	0.0006331	Paxs	488.25	Joback Method
dvisc	0.0003336	Paxs	547.19	Joback Method
dvisc	0.0001991	Paxs	606.12	Joback Method
dvisc	0.0001302	Paxs	665.06	Joback Method
dvisc	0.0000913	Paxs	723.99	Joback Method
dvisc	0.0000675	Paxs	782.93	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=U390475&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U390475&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>cp<sub>g</sub>:</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>log<sub>10</sub>ws:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>m<sub>cvol</sub>:</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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