

# Succinic acid, 2,3-dimethylphenyl heptyl ester

**Inchi:** InChI=1S/C19H28O4/c1-4-5-6-7-8-14-22-18(20)12-13-19(21)23-17-11-9-10-15(2)16(17)3  
**InchiKey:** BDAOJSKYRAVJBR-UHFFFAOYSA-N  
**Formula:** C19H28O4  
**SMILES:** CCCCCCOC(=O)CCC(=O)Oc1cccc(C)c1C  
**Mol. weight [g/mol]:** 320.42

## Physical Properties

Property code	Value	Unit	Source
gf	-265.59	kJ/mol	Joback Method
hf	-711.50	kJ/mol	Joback Method
hfus	43.80	kJ/mol	Joback Method
hvap	79.80	kJ/mol	Joback Method
log10ws	-5.37		Crippen Method
logp	4.503		Crippen Method
mcvol	269.690	ml/mol	McGowan Method
pc	1425.07	kPa	Joback Method
rinpol	2358.00		NIST Webbook
rinpol	2358.00		NIST Webbook
tb	823.34	K	Joback Method
tc	1023.69	K	Joback Method
tf	499.67	K	Joback Method
vc	1.040	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	818.39	J/molxK	823.34	Joback Method
cpg	834.21	J/molxK	856.73	Joback Method
cpg	848.96	J/molxK	890.12	Joback Method
cpg	862.63	J/molxK	923.52	Joback Method
cpg	875.24	J/molxK	956.91	Joback Method
cpg	886.82	J/molxK	990.30	Joback Method
cpg	897.37	J/molxK	1023.69	Joback Method
dvisc	0.0005610	Paxs	499.67	Joback Method

dvisc	0.0003271	Paxs	553.62	Joback Method
dvisc	0.0002098	Paxs	607.56	Joback Method
dvisc	0.0001447	Paxs	661.50	Joback Method
dvisc	0.0001056	Paxs	715.45	Joback Method
dvisc	0.0000805	Paxs	769.39	Joback Method
dvisc	0.0000636	Paxs	823.34	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U349623&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U349623&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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