

# Adipic acid, 2-heptyl isobutyl ester

<b>Inchi:</b>	InChI=1S/C17H32O4/c1-5-6-7-10-15(4)21-17(19)12-9-8-11-16(18)20-13-14(2)3/h14-15H
<b>InchiKey:</b>	IAIDFEVPNJBYQM-UHFFFAOYSA-N
<b>Formula:</b>	C17H32O4
<b>SMILES:</b>	CCCCC(C)OC(=O)CCCC(=O)OCC(C)C
<b>Mol. weight [g/mol]:</b>	300.43

## Physical Properties

Property code	Value	Unit	Source
gf	-380.46	kJ/mol	Joback Method
hf	-894.37	kJ/mol	Joback Method
hfus	38.31	kJ/mol	Joback Method
hvap	70.97	kJ/mol	Joback Method
log10ws	-4.53		Crippen Method
logp	4.258		Crippen Method
mcvol	265.270	ml/mol	McGowan Method
pc	1330.04	kPa	Joback Method
rinsol	1919.00		NIST Webbook
tb	740.06	K	Joback Method
tc	920.59	K	Joback Method
tf	395.67	K	Joback Method
vc	1.024	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	792.00	J/molxK	740.06	Joback Method
cpg	869.70	J/molxK	890.50	Joback Method
cpg	855.95	J/molxK	860.41	Joback Method
cpg	841.31	J/molxK	830.32	Joback Method
cpg	825.78	J/molxK	800.24	Joback Method
cpg	809.35	J/molxK	770.15	Joback Method
cpg	882.59	J/molxK	920.59	Joback Method
dvisc	0.0000690	Paxs	740.06	Joback Method
dvisc	0.0000940	Paxs	682.66	Joback Method

dvisc	0.0001355	Paxs	625.26	Joback Method
dvisc	0.0002105	Paxs	567.87	Joback Method
dvisc	0.0003610	Paxs	510.47	Joback Method
dvisc	0.0007096	Paxs	453.07	Joback Method
dvisc	0.0016971	Paxs	395.67	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=U353643&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U353643&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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