

# Succinic acid, isobutyl 2-methyl-3-nitrobenzyl ester

<b>Inchi:</b>	InChI=1S/C16H21NO6/c1-11(2)9-22-15(18)7-8-16(19)23-10-13-5-4-6-14(12(13)3)17(20)
<b>InchiKey:</b>	OABXGYDCELPZIH-UHFFFAOYSA-N
<b>Formula:</b>	C16H21NO6
<b>SMILES:</b>	<chem>Cc1c(COC(=O)CCC(=O)OCC(C)C)cccc1[N+](=O)[O-]</chem>
<b>Mol. weight [g/mol]:</b>	323.34

## Physical Properties

Property code	Value	Unit	Source
gf	-257.74	kJ/mol	Joback Method
hf	-665.62	kJ/mol	Joback Method
hfus	43.87	kJ/mol	Joback Method
hvap	89.33	kJ/mol	Joback Method
log10ws	-4.31		Crippen Method
logp	2.926		Crippen Method
mcvol	244.840	ml/mol	McGowan Method
pc	1824.72	kPa	Joback Method
rinpola	2380.00		NIST Webbook
rinpola	2380.00		NIST Webbook
tb	906.10	K	Joback Method
tc	1131.81	K	Joback Method
tf	594.47	K	Joback Method
vc	0.948	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	754.10	J/molxK	906.10	Joback Method
cpg	766.19	J/molxK	943.72	Joback Method
cpg	777.05	J/molxK	981.34	Joback Method
cpg	786.69	J/molxK	1018.96	Joback Method
cpg	795.14	J/molxK	1056.57	Joback Method
cpg	802.40	J/molxK	1094.19	Joback Method
cpg	808.50	J/molxK	1131.81	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=U380841&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U380841&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<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>rinpola:</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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