

# (R\*,S\*)-2,3-diphenylsuccinic acid

<b>Other names:</b>	Meso-2,3-diphenylsuccinic acid
<b>Inchi:</b>	InChI=1S/C16H14O4/c17-15(18)13(11-7-3-1-4-8-11)14(16(19)20)12-9-5-2-6-10-12/h1-10
<b>InchiKey:</b>	PVXCQHHWNDJIJP-OKILXGFUSA-N
<b>Formula:</b>	C16H14O4
<b>SMILES:</b>	O=C(O)C(c1ccccc1)C(C(=O)O)c1ccccc1
<b>Mol. weight [g/mol]:</b>	270.28
<b>CAS:</b>	1225-13-4

## Physical Properties

Property code	Value	Unit	Source
chs	-7563.50 ± 3.80	kJ/mol	NIST Webbook
gf	-227.70	kJ/mol	Joback Method
hf	-440.69	kJ/mol	Joback Method
hfus	29.61	kJ/mol	Joback Method
hvap	101.84	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.723		Crippen Method
mcvol	203.660	ml/mol	McGowan Method
pc	3206.41	kPa	Joback Method
tb	910.06	K	Joback Method
tc	1132.47	K	Joback Method
tf	514.42	K	Joback Method
vc	0.753	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	603.65	J/molxK	910.06	Joback Method
cpg	612.66	J/molxK	947.13	Joback Method
cpg	620.90	J/molxK	984.20	Joback Method
cpg	628.43	J/molxK	1021.27	Joback Method
cpg	635.32	J/molxK	1058.34	Joback Method
cpg	641.64	J/molxK	1095.40	Joback Method
cpg	647.47	J/molxK	1132.47	Joback Method

dvisc	0.0004152	Paxs	514.42	Joback Method
dvisc	0.0001130	Paxs	580.36	Joback Method
dvisc	0.0000401	Paxs	646.30	Joback Method
dvisc	0.0000173	Paxs	712.24	Joback Method
dvisc	0.0000086	Paxs	778.18	Joback Method
dvisc	0.0000047	Paxs	844.12	Joback Method
dvisc	0.0000029	Paxs	910.06	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=C1225134&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1225134&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</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>chs:</b>	Standard solid enthalpy of combustion
<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>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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