

Succinic acid, phenyl 2-biphenyl ester

Inchi:	InChI=1S/C22H18O4/c23-21(25-18-11-5-2-6-12-18)15-16-22(24)26-20-14-8-7-13-19(20)
InchiKey:	CEKZOMOKRKAFES-UHFFFAOYSA-N
Formula:	C22H18O4
SMILES:	O=C(CCC(=O)Oc1ccccc1-c1ccccc1)Oc1ccccc1
Mol. weight [g/mol]:	346.38

Physical Properties

Property code	Value	Unit	Source
gf	-5.88	kJ/mol	Joback Method
hf	-288.89	kJ/mol	Joback Method
hfus	40.04	kJ/mol	Joback Method
hvap	90.37	kJ/mol	Joback Method
log10ws	-6.35		Crippen Method
logp	4.645		Crippen Method
mcvol	264.440	ml/mol	McGowan Method
pc	1957.87	kPa	Joback Method
rinsol	2819.00		NIST Webbook
tb	940.36	K	Joback Method
tc	1190.02	K	Joback Method
tf	573.80	K	Joback Method
vc	0.992	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	793.82	J/molxK	940.36	Joback Method
cpg	840.50	J/molxK	1148.41	Joback Method
cpg	833.81	J/molxK	1106.80	Joback Method
cpg	825.88	J/molxK	1065.19	Joback Method
cpg	816.62	J/molxK	1023.58	Joback Method
cpg	805.96	J/molxK	981.97	Joback Method
cpg	846.02	J/molxK	1190.02	Joback Method
dvisc	0.0000438	Paxs	940.36	Joback Method
dvisc	0.0000553	Paxs	879.27	Joback Method

dvisc	0.0000724	Paxs	818.17	Joback Method
dvisc	0.0000990	Paxs	757.08	Joback Method
dvisc	0.0001429	Paxs	695.99	Joback Method
dvisc	0.0002214	Paxs	634.89	Joback Method
dvisc	0.0003766	Paxs	573.80	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357995&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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