Succinic acid, phenethyl 2-biphenyl ester

Inchi: InChI=1S/C24H22O4/c25-23(27-18-17-19-9-3-1-4-10-19)15-16-24(26)28-22-14-8-7-13-2
InchiKey: NDCKSFNSZNPVSU-UHFFFAOYSA-N
Formula: C24H22O4
SMILES: O=C(CCC(=O)Oc1ccccc1-c1ccccc1)OCCc1ccccc1
Mol. weight [g/mol]: 374.43

Physical Properties

Property code	Value	Unit	Source
gf	10.96	kJ/mol	Joback Method
hf	-330.17	kJ/mol	Joback Method
hfus	45.22	kJ/mol	Joback Method
hvap	94.82	kJ/mol	Joback Method
log10ws	-6.54		Crippen Method
logp	4.825		Crippen Method
mcvol	292.620	ml/mol	McGowan Method
pc	1663.26	kPa	Joback Method
rinpol	3047.00		NIST Webbook
rinpol	3047.00		NIST Webbook
tb	986.12	K	Joback Method
tc	1230.95	K	Joback Method
tf	596.34	K	Joback Method
vc	1.103	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	909.65	J/mol×K	986.12	Joback Method
cpg	956.35	J/mol×K	1190.14	Joback Method
cpg	949.61	J/mol×K	1149.34	Joback Method
cpg	941.64	J/mol×K	1108.53	Joback Method
cpg	932.38	J/mol×K	1067.73	Joback Method
cpg	921.75	J/mol×K	1026.92	Joback Method
cpg	961.96	J/mol×K	1230.95	Joback Method
dvisc	0.0000329	Pa×s	986.12	Joback Method

dvisc	0.0000418	Pa×s	921.16	Joback Method
dvisc	0.0000552	Pa×s	856.19	Joback Method
dvisc	0.0000761	Pa×s	791.23	Joback Method
dvisc	0.0001112	Pa×s	726.27	Joback Method
dvisc	0.0001751	Pa×s	661.30	Joback Method
dvisc	0.0003044	Pa×s	596.34	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U358008&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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