Succinic acid, 2-methylphenyl 2-biphenyl ester

Inchi: InChI=1S/C23H20O4/c1-17-9-5-7-13-20(17)26-22(24)15-16-23(25)27-21-14-8-6-12-19(2
InchiKey: UZFIFGAWWOEWQB-UHFFFAOYSA-N
Formula: C23H20O4
SMILES: Cc1ccccc1OC(=O)CCC(=O)Oc1ccccc1-c1ccccc1
Mol. weight [g/mol]: 360.40

Physical Properties

Property code	Value	Unit	Source
gf	-7.09	kJ/mol	Joback Method
hf	-321.00	kJ/mol	Joback Method
hfus	42.24	kJ/mol	Joback Method
hvap	93.26	kJ/mol	Joback Method
log10ws	-6.83		Crippen Method
logp	4.953		Crippen Method
mcvol	278.530	ml/mol	McGowan Method
pc	1778.84	kPa	Joback Method
rinpol	2896.00		NIST Webbook
rinpol	2896.00		NIST Webbook
tb	968.22	K	Joback Method
tc	1215.77	K	Joback Method
tf	597.59	K	Joback Method
vc	1.048	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	849.94	J/mol×K	968.22	Joback Method
cpg	861.92	J/mol×K	1009.48	Joback Method
cpg	872.40	J/mol×K	1050.74	Joback Method
cpg	881.46	J/mol×K	1091.99	Joback Method
cpg	889.16	J/mol×K	1133.25	Joback Method
cpg	895.58	J/mol×K	1174.51	Joback Method
cpg	900.77	J/mol×K	1215.77	Joback Method
dvisc	0.0003043	Pa×s	597.59	Joback Method

dvisc	0.0001840	Pa×s	659.36	Joback Method
dvisc	0.0001212	Pa×s	721.13	Joback Method
dvisc	0.0000853	Pa×s	782.90	Joback Method
dvisc	0.0000632	Pa×s	844.68	Joback Method
dvisc	0.0000488	Pa×s	906.45	Joback Method
dvisc	0.0000389	Pa×s	968.22	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357543&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