Succinic acid, dec-2-yl diphenylmethyl ester

Inchi: InChI=1S/C27H36O4/c1-3-4-5-6-7-10-15-22(2)30-25(28)20-21-26(29)31-27(23-16-11-8-1
InchiKey: RIMHXUMGJLHZLP-UHFFFAOYSA-N
Formula: C27H36O4
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 424.57

Physical Properties

Property code	Value	Unit	Source
gf	-71.44	kJ/mol	Joback Method
hf	-627.71	kJ/mol	Joback Method
hfus	52.30	kJ/mol	Joback Method
hvap	97.78	kJ/mol	Joback Method
log10ws	-7.73		Crippen Method
logp	6.782		Crippen Method
mcvol	358.650	ml/mol	McGowan Method
pc	1082.06	kPa	Joback Method
rinpol	3022.00		NIST Webbook
rinpol	3022.00		NIST Webbook
tb	1022.22	K	Joback Method
tc	1252.98	K	Joback Method
tf	561.21	K	Joback Method
vc	1.367	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1200.61	J/mol×K	1022.22	Joback Method
cpg	1215.37	J/mol×K	1060.68	Joback Method
cpg	1228.62	J/mol×K	1099.14	Joback Method
cpg	1240.42	J/mol×K	1137.60	Joback Method
cpg	1250.86	J/mol×K	1176.06	Joback Method
cpg	1260.01	J/mol×K	1214.52	Joback Method
cpg	1267.96	J/mol×K	1252.98	Joback Method
dvisc	0.0003274	Pa×s	561.21	Joback Method

dvisc	0.0001470	Pa×s	638.05	Joback Method
dvisc	0.0000784	Pa×s	714.88	Joback Method
dvisc	0.0000472	Pa×s	791.72	Joback Method
dvisc	0.0000311	Pa×s	868.55	Joback Method
dvisc	0.0000220	Pa×s	945.38	Joback Method
dvisc	0.0000163	Pa×s	1022.22	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390173&Units=SI

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