Succinic acid, dec-2-yl 3-phenoxybenzyl ester

Inchi: InChI=1S/C27H36O5/c1-3-4-5-6-7-9-13-22(2)31-27(29)19-18-26(28)30-21-23-14-12-17-2
InchiKey: VORHSEJOTQJKNJ-UHFFFAOYSA-N
Formula: C27H36O5
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OCc1cccc(Oc2ccccc2)c1
Mol. weight [g/mol]: 440.57

Physical Properties

Property code	Value	Unit	Source
gf	-183.63	kJ/mol	Joback Method
hf	-766.12	kJ/mol	Joback Method
hfus	56.62	kJ/mol	Joback Method
hvap	101.24	kJ/mol	Joback Method
log10ws	-7.68		Crippen Method
logp	6.985		Crippen Method
mcvol	364.520	ml/mol	McGowan Method
pc	1054.14	kPa	Joback Method
rinpol	3133.00		NIST Webbook
rinpol	3133.00		NIST Webbook
tb	1050.06	K	Joback Method
tc	1285.62	K	Joback Method
tf	610.96	K	Joback Method
vc	1.391	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1226.04	J/mol×K	1050.06	Joback Method
cpg	1276.07	J/mol×K	1246.36	Joback Method
cpg	1269.37	J/mol×K	1207.10	Joback Method
cpg	1261.07	J/mol×K	1167.84	Joback Method
cpg	1251.12	J/mol×K	1128.58	Joback Method
cpg	1239.46	J/mol×K	1089.32	Joback Method
cpg	1281.23	J/mol×K	1285.62	Joback Method
dvisc	0.0000135	Pa×s	1050.06	Joback Method

dvisc	0.0000177	Pa×s	976.88	Joback Method
dvisc	0.0000242	Pa×s	903.69	Joback Method
dvisc	0.0000349	Pa×s	830.51	Joback Method
dvisc	0.0000542	Pa×s	757.33	Joback Method
dvisc	0.0000922	Pa×s	684.14	Joback Method
dvisc	0.0001782	Pa×s	610.96	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390376&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

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