Succinic acid, dec-2-yl 4-acetylphenyl ester

Inchi: InChI=1S/C22H32O5/c1-4-5-6-7-8-9-10-17(2)26-21(24)15-16-22(25)27-20-13-11-19(12-1
InchiKey: AUILZZSDUULNPN-UHFFFAOYSA-N
Formula: C22H32O5
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)Oc1ccc(C(C)=O)cc1
Mol. weight [g/mol]: 376.49

Physical Properties

Property code	Value	Unit	Source
gf	-362.06	kJ/mol	Joback Method
hf	-879.81	kJ/mol	Joback Method
hfus	50.04	kJ/mol	Joback Method
hvap	92.17	kJ/mol	Joback Method
log10ws	-6.44		Crippen Method
logp	5.257		Crippen Method
mcvol	313.530	ml/mol	McGowan Method
pc	1230.28	kPa	Joback Method
rinpol	2845.00		NIST Webbook
rinpol	2845.00		NIST Webbook
tb	940.43	K	Joback Method
tc	1154.17	K	Joback Method
tf	555.89	K	Joback Method
vc	1.208	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1013.54	J/mol×K	940.43	Joback Method
cpg	1073.91	J/mol×K	1118.55	Joback Method
cpg	1064.39	J/mol×K	1082.93	Joback Method
cpg	1053.63	J/mol×K	1047.30	Joback Method
cpg	1041.59	J/mol×K	1011.68	Joback Method
cpg	1028.24	J/mol×K	976.05	Joback Method
cpg	1082.20	J/mol×K	1154.17	Joback Method
dvisc	0.0000357	Pa×s	940.43	Joback Method

dvisc	0.0000465	Pa×s	876.34	Joback Method
dvisc	0.0000631	Pa×s	812.25	Joback Method
dvisc	0.0000901	Pa×s	748.16	Joback Method
dvisc	0.0001377	Pa×s	684.07	Joback Method
dvisc	0.0002297	Pa×s	619.98	Joback Method
dvisc	0.0004310	Pa×s	555.89	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U389914&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