Succinic acid, 2-ethylhexyl 4-acetylphenyl ester

Inchi: InChI=1S/C20H28O5/c1-4-6-7-16(5-2)14-24-19(22)12-13-20(23)25-18-10-8-17(9-11-18)1

InchiKey: HVGDOPFJKOQUNL-UHFFFAOYSA-N

Formula: C20H28O5

SMILES: CCCCC(CC)COC(=O)CCC(=O)Oc1ccc(C(C)=O)cc1

Mol. weight [g/mol]: 348.43

Physical Properties

Property code	Value	Unit	Source
gf	-378.90	kJ/mol	Joback Method
hf	-838.53	kJ/mol	Joback Method
hfus	44.86	kJ/mol	Joback Method
hvap	87.72	kJ/mol	Joback Method
log10ws	-5.25		Crippen Method
logp	4.334		Crippen Method
mcvol	285.350	ml/mol	McGowan Method
pc	1414.37	kPa	Joback Method
rinpol	2671.00		NIST Webbook
tb	894.67	K	Joback Method
tc	1104.53	K	Joback Method
tf	533.35	K	Joback Method
vc	1.095	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	894.53	J/mol×K	894.67	Joback Method
cpg	908.92	J/mol×K	929.65	Joback Method
cpg	922.09	J/mol×K	964.62	Joback Method
cpg	934.05	J/mol×K	999.60	Joback Method
cpg	944.83	J/mol×K	1034.58	Joback Method
cpg	954.45	J/mol×K	1069.55	Joback Method
cpg	962.93	J/mol×K	1104.53	Joback Method
dvisc	0.0005397	Pa×s	533.35	Joback Method
dvisc	0.0002938	Pa×s	593.57	Joback Method

dvisc	0.0001789	Pa×s	653.79	Joback Method
dvisc	0.0001185	Pa×s	714.01	Joback Method
dvisc	0.0000836	Pa×s	774.23	Joback Method
dvisc	0.0000621	Pa×s	834.45	Joback Method
dvisc	0.0000480	Pa×s	894.67	Joback Method

Sources

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=U389912&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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