Succinic acid, 2-methylphenyl 3,4-dimethylphenyl ester

Inchi: InChI=1S/C19H20O4/c1-13-8-9-16(12-15(13)3)22-18(20)10-11-19(21)23-17-7-5-4-6-14(1

InchiKey: SMENWLGVPUZVDR-UHFFFAOYSA-N

Formula: C19H20O4

SMILES: Cc1ccc(OC(=O)CCC(=O)Oc2ccccc2C)cc1C

Mol. weight [g/mol]: 312.36

Physical Properties

Property code	Value	Unit	Source
gf	-162.81	kJ/mol	Joback Method
hf	-486.44	kJ/mol	Joback Method
hfus	37.45	kJ/mol	Joback Method
hvap	82.74	kJ/mol	Joback Method
log10ws	-5.18		Crippen Method
logp	3.903		Crippen Method
mcvol	245.930	ml/mol	McGowan Method
pc	1837.26	kPa	Joback Method
rinpol	2574.00		NIST Webbook
rinpol	2574.00		NIST Webbook
tb	855.00	K	Joback Method
tc	1082.36	K	Joback Method
tf	538.61	K	Joback Method
vc	0.931	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	722.06	J/mol×K	855.00	Joback Method
cpg	735.95	J/mol×K	892.89	Joback Method
cpg	748.57	J/mol×K	930.79	Joback Method
cpg	759.95	J/mol×K	968.68	Joback Method
cpg	770.09	J/mol×K	1006.57	Joback Method
cpg	779.04	J/mol×K	1044.46	Joback Method
cpg	786.80	J/mol×K	1082.36	Joback Method
dvisc	0.0004374	Pa×s	538.61	Joback Method

dvisc	0.0002774	Pa×s	591.34	Joback Method
dvisc	0.0001896	Pa×s	644.07	Joback Method
dvisc	0.0001373	Pa×s	696.81	Joback Method
dvisc	0.0001040	Pa×s	749.54	Joback Method
dvisc	0.0000817	Pa×s	802.27	Joback Method
dvisc	0.0000662	Pa×s	855.00	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357540&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