Succinic acid, 3-methylbut-2-yl 2-naphthyl ester

Inchi: InChI=1S/C19H22O4/c1-13(2)14(3)22-18(20)10-11-19(21)23-17-9-8-15-6-4-5-7-16(15)12

InchiKey: PSEDKZZDFCJISF-UHFFFAOYSA-N

Formula: C19H22O4

SMILES: CC(C)C(C)OC(=O)CCC(=O)Oc1ccc2ccccc2c1

Mol. weight [g/mol]: 314.38

Physical Properties

Property code	Value	Unit	Source
gf	-154.19	kJ/mol	Joback Method
hf	-519.52	kJ/mol	Joback Method
hfus	34.16	kJ/mol	Joback Method
hvap	80.00	kJ/mol	Joback Method
log10ws	-5.25		Crippen Method
logp	4.113		Crippen Method
mcvol	250.230	ml/mol	McGowan Method
pc	1775.84	kPa	Joback Method
rinpol	2508.00		NIST Webbook
tb	836.46	K	Joback Method
tc	1057.07	K	Joback Method
tf	489.85	K	Joback Method
vc	0.950	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	746.58	J/mol×K	836.46	Joback Method
cpg	808.95	J/mol×K	1020.30	Joback Method
cpg	798.54	J/mol×K	983.53	Joback Method
cpg	787.14	J/mol×K	946.76	Joback Method
cpg	774.72	J/mol×K	910.00	Joback Method
cpg	761.22	J/mol×K	873.23	Joback Method
cpg	818.44	J/mol×K	1057.07	Joback Method
dvisc	0.0001032	Pa×s	836.46	Joback Method
dvisc	0.0001300	Pa×s	778.69	Joback Method

dvisc	0.0001698	Pa×s	720.92	Joback Method
dvisc	0.0002323	Pa×s	663.15	Joback Method
dvisc	0.0003376	Pa×s	605.39	Joback Method
dvisc	0.0005307	Pa×s	547.62	Joback Method
dvisc	0.0009282	Pa×s	489.85	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=U389834&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