Succinic acid, naphth-2-ylmethyl 2,3-dimethylphenyl ester

Inchi: InChI=1S/C23H22O4/c1-16-6-5-9-21(17(16)2)27-23(25)13-12-22(24)26-15-18-10-11-19-

InchiKey: MQIFXZXDEVMGAR-UHFFFAOYSA-N

Formula: C23H22O4

SMILES: Cc1cccc(OC(=O)CCC(=O)OCc2ccc3ccccc3c2)c1C

Mol. weight [g/mol]: 362.42

Physical Properties

Property code	Value	Unit	Source
gf	-22.48	kJ/mol	Joback Method
hf	-377.93	kJ/mol	Joback Method
hfus	44.83	kJ/mol	Joback Method
hvap	93.28	kJ/mol	Joback Method
log10ws	-6.77		Crippen Method
logp	4.886		Crippen Method
mcvol	282.830	ml/mol	McGowan Method
pc	1636.45	kPa	Joback Method
rinpol	3219.00		NIST Webbook
rinpol	3219.00		NIST Webbook
tb	965.50	K	Joback Method
tc	1203.33	K	Joback Method
tf	616.39	K	Joback Method
vc	1.077	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	872.80	J/mol×K	965.50	Joback Method
cpg	885.59	J/mol×K	1005.14	Joback Method
cpg	897.17	J/mol×K	1044.78	Joback Method
cpg	907.61	J/mol×K	1084.41	Joback Method
cpg	916.97	J/mol×K	1124.05	Joback Method
cpg	925.34	J/mol×K	1163.69	Joback Method
cpg	932.78	J/mol×K	1203.33	Joback Method
dvisc	0.0004197	Pa×s	616.39	Joback Method

dvisc	0.0002826	Pa×s	674.58	Joback Method
dvisc	0.0002025	Pa×s	732.76	Joback Method
dvisc	0.0001525	Pa×s	790.95	Joback Method
dvisc	0.0001193	Pa×s	849.13	Joback Method
dvisc	0.0000964	Pa×s	907.32	Joback Method
dvisc	0.0000799	Pa×s	965.50	Joback Method

Sources

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=U390034&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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