Succinic acid, 4-chloro-3-methylphenyl 2-naphthylmethyl ester

Inchi: InChI=1S/C22H19ClO4/c1-15-12-19(8-9-20(15)23)27-22(25)11-10-21(24)26-14-16-6-7-1

InchiKey: IZHNINFIEFKAOU-UHFFFAOYSA-N

Formula: C22H19ClO4

SMILES: Cc1cc(OC(=O)CCC(=O)OCc2ccc3ccccc3c2)ccc1Cl

Mol. weight [g/mol]: 382.84

Physical Properties

Property code	Value	Unit	Source
gf	-42.83	kJ/mol	Joback Method
hf	-373.03	kJ/mol	Joback Method
hfus	46.44	kJ/mol	Joback Method
hvap	95.44	kJ/mol	Joback Method
log10ws	-6.98		Crippen Method
logp	5.231		Crippen Method
mcvol	280.980	ml/mol	McGowan Method
pc	1717.45	kPa	Joback Method
rinpol	3270.00		NIST Webbook
rinpol	3270.00		NIST Webbook
tb	980.05	K	Joback Method
tc	1222.80	K	Joback Method
tf	635.04	K	Joback Method
vc	1.071	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	834.91	J/mol×K	980.05	Joback Method
cpg	846.32	J/mol×K	1020.51	Joback Method
cpg	856.58	J/mol×K	1060.97	Joback Method
cpg	865.76	J/mol×K	1101.43	Joback Method
cpg	873.93	J/mol×K	1141.88	Joback Method
cpg	881.18	J/mol×K	1182.34	Joback Method
cpg	887.58	J/mol×K	1222.80	Joback Method
dvisc	0.0003979	Pa×s	635.04	Joback Method

dvisc	0.0002721	Pa×s	692.54	Joback Method
dvisc	0.0001973	Pa×s	750.04	Joback Method
dvisc	0.0001497	Pa×s	807.54	Joback Method
dvisc	0.0001179	Pa×s	865.05	Joback Method
dvisc	0.0000956	Pa×s	922.55	Joback Method
dvisc	0.0000795	Pa×s	980.05	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=U390008&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