Succinic acid, naphth-2-ylmethyl 1-phenylpropyl ester

Inchi: InChI=1S/C24H24O4/c1-2-22(20-9-4-3-5-10-20)28-24(26)15-14-23(25)27-17-18-12-13-1

InchiKey: HLLCKTLNMPYUDF-UHFFFAOYSA-N

Formula: C24H24O4

SMILES: CCC(OC(=O)CCC(=O)OCc1ccc2ccccc2c1)c1ccccc1

Mol. weight [g/mol]: 376.44

Physical Properties

Property code	Value	Unit	Source
gf	2.76	kJ/mol	Joback Method
hf	-380.91	kJ/mol	Joback Method
hfus	44.68	kJ/mol	Joback Method
hvap	93.80	kJ/mol	Joback Method
log10ws	-6.88		Crippen Method
logp	5.358		Crippen Method
mcvol	296.920	ml/mol	McGowan Method
pc	1562.28	kPa	Joback Method
rinpol	3047.00		NIST Webbook
rinpol	3047.00		NIST Webbook
tb	977.98	K	Joback Method
tc	1215.73	K	Joback Method
tf	587.62	K	Joback Method
vc	1.127	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	934.73	J/mol×K	977.98	Joback Method
cpg	947.92	J/mol×K	1017.60	Joback Method
cpg	959.92	J/mol×K	1057.23	Joback Method
cpg	970.80	J/mol×K	1096.85	Joback Method
cpg	980.66	J/mol×K	1136.48	Joback Method
cpg	989.60	J/mol×K	1176.10	Joback Method
cpg	997.72	J/mol×K	1215.73	Joback Method
dvisc	0.0004831	Pa×s	587.62	Joback Method

dvisc	0.0002874	Pa×s	652.68	Joback Method
dvisc	0.0001878	Pa×s	717.74	Joback Method
dvisc	0.0001317	Pa×s	782.80	Joback Method
dvisc	0.0000976	Pa×s	847.86	Joback Method
dvisc	0.0000754	Pa×s	912.92	Joback Method
dvisc	0.0000603	Pa×s	977.98	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U389938&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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