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

Inchi: InChI=1S/C24H24O4/c25-23(27-16-6-9-19-7-2-1-3-8-19)14-15-24(26)28-18-20-12-13-21

InchiKey: BWPUAGZNUMLIGW-UHFFFAOYSA-N

Formula: C24H24O4

SMILES: O=C(CCC(=O)OCc1ccc2ccccc2c1)OCCCc1ccccc1

Mol. weight [g/mol]: 376.44

Physical Properties

Property code	Value	Unit	Source
gf	5.20	kJ/mol	Joback Method
hf	-375.63	kJ/mol	Joback Method
hfus	48.20	kJ/mol	Joback Method
hvap	94.18	kJ/mol	Joback Method
log10ws	-6.43		Crippen Method
logp	4.839		Crippen Method
mcvol	296.920	ml/mol	McGowan Method
pc	1552.45	kPa	Joback Method
rinpol	3308.00		NIST Webbook
rinpol	3308.00		NIST Webbook
tb	978.42	K	Joback Method
tc	1213.90	K	Joback Method
tf	602.62	K	Joback Method
vc	1.133	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	934.30	J/mol×K	978.42	Joback Method
cpg	947.44	J/mol×K	1017.67	Joback Method
cpg	959.41	J/mol×K	1056.91	Joback Method
cpg	970.31	J/mol×K	1096.16	Joback Method
cpg	980.22	J/mol×K	1135.41	Joback Method
cpg	989.24	J/mol×K	1174.66	Joback Method
cpg	997.47	J/mol×K	1213.90	Joback Method
dvisc	0.0004557	Pa×s	602.62	Joback Method

dvisc	0.0002841	Pa×s	665.25	Joback Method
dvisc	0.0001921	Pa×s	727.89	Joback Method
dvisc	0.0001382	Pa×s	790.52	Joback Method
dvisc	0.0001044	Pa×s	853.15	Joback Method
dvisc	0.0000819	Pa×s	915.79	Joback Method
dvisc	0.0000663	Pa×s	978.42	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=U389739&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