Succinic acid, naphth-2-ylmethyl cis-pent-2-en-1-yl ester

Inchi: InChI=1S/C20H22O4/c1-2-3-6-13-23-19(21)11-12-20(22)24-15-16-9-10-17-7-4-5-8-18(17

InchiKey: AKVQRGQSJKBXHL-UTCJRWHESA-N

Formula: C20H22O4

SMILES: CCC=CCOC(=O)CCC(=O)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 326.39

Physical Properties

Property code	Value	Unit	Source
gf	-60.67	kJ/mol	Joback Method
hf	-412.38	kJ/mol	Joback Method
hfus	44.00	kJ/mol	Joback Method
hvap	82.96	kJ/mol	Joback Method
log10ws	-5.50		Crippen Method
logp	4.173		Crippen Method
mcvol	260.020	ml/mol	McGowan Method
pc	1689.34	kPa	Joback Method
rinpol	2767.00		NIST Webbook
rinpol	2767.00		NIST Webbook
tb	864.38	K	Joback Method
tc	1083.58	K	Joback Method
tf	526.04	K	Joback Method
vc	0.998	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	775.71	J/mol×K	864.38	Joback Method
cpg	789.82	J/mol×K	900.91	Joback Method
cpg	802.93	J/mol×K	937.45	Joback Method
cpg	815.11	J/mol×K	973.98	Joback Method
cpg	826.43	J/mol×K	1010.51	Joback Method
cpg	836.95	J/mol×K	1047.05	Joback Method
cpg	846.75	J/mol×K	1083.58	Joback Method
dvisc	0.0006514	Pa×s	526.04	Joback Method

dvisc	0.0004044	Pa×s	582.43	Joback Method
dvisc	0.0002730	Pa×s	638.82	Joback Method
dvisc	0.0001965	Pa×s	695.21	Joback Method
dvisc	0.0001486	Pa×s	751.60	Joback Method
dvisc	0.0001168	Pa×s	807.99	Joback Method
dvisc	0.0000947	Pa×s	864.38	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=U391273&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