Succinic acid, naphth-2-ylmethyl pent-4-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: UIOAIDAKBFNIHV-UHFFFAOYSA-N

Formula: C20H22O4

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

Mol. weight [g/mol]: 326.39

Physical Properties

Property code	Value	Unit	Source
gf	-53.05	kJ/mol	Joback Method
hf	-404.17	kJ/mol	Joback Method
hfus	42.52	kJ/mol	Joback Method
hvap	82.33	kJ/mol	Joback Method
log10ws	-5.50		Crippen Method
logp	4.173		Crippen Method
mcvol	260.020	ml/mol	McGowan Method
pc	1675.53	kPa	Joback Method
rinpol	2756.00		NIST Webbook
rinpol	2756.00		NIST Webbook
tb	856.90	K	Joback Method
tc	1073.03	K	Joback Method
tf	529.36	K	Joback Method
vc	0.999	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	775.44	J/mol×K	856.90	Joback Method
cpg	789.47	J/mol×K	892.92	Joback Method
cpg	802.48	J/mol×K	928.94	Joback Method
cpg	814.51	J/mol×K	964.96	Joback Method
cpg	825.62	J/mol×K	1000.99	Joback Method
cpg	835.86	J/mol×K	1037.01	Joback Method
cpg	845.30	J/mol×K	1073.03	Joback Method
dvisc	0.0007300	Pa×s	529.36	Joback Method

dvisc	0.0004654	Pa×s	583.95	Joback Method
dvisc	0.0003204	Pa×s	638.54	Joback Method
dvisc	0.0002339	Pa×s	693.13	Joback Method
dvisc	0.0001788	Pa×s	747.72	Joback Method
dvisc	0.0001418	Pa×s	802.31	Joback Method
dvisc	0.0001158	Pa×s	856.90	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=U391078&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