Succinic acid, naphth-2-ylmethyl 3-methylbut-3-en-1-yl ester

Inchi: InChI=1S/C20H22O4/c1-15(2)11-12-23-19(21)9-10-20(22)24-14-16-7-8-17-5-3-4-6-18(17

InchiKey: HPSWUNCWFLOVBU-UHFFFAOYSA-N

Formula: C20H22O4

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

Mol. weight [g/mol]: 326.39

Physical Properties

Property code	Value	Unit	Source
gf	-61.60	kJ/mol	Joback Method
hf	-413.96	kJ/mol	Joback Method
hfus	41.21	kJ/mol	Joback Method
hvap	82.41	kJ/mol	Joback Method
log10ws	-5.50		Crippen Method
logp	4.173		Crippen Method
mcvol	260.020	ml/mol	McGowan Method
pc	1682.41	kPa	Joback Method
rinpol	2722.00		NIST Webbook
rinpol	2722.00		NIST Webbook
tb	856.78	K	Joback Method
tc	1075.11	K	Joback Method
tf	515.40	K	Joback Method
vc	1.000	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	775.07	J/mol×K	856.78	Joback Method
cpg	789.25	J/mol×K	893.17	Joback Method
cpg	802.38	J/mol×K	929.56	Joback Method
cpg	814.53	J/mol×K	965.94	Joback Method
cpg	825.75	J/mol×K	1002.33	Joback Method
cpg	836.09	J/mol×K	1038.72	Joback Method
cpg	845.62	J/mol×K	1075.11	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=U391148&Units=SI

Legend

cpg:	Ideal gas heat capacity
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