Succinic acid, naphth-2-ylmethyl 2-methylbutyl ester

Inchi: InChI=1S/C20H24O4/c1-3-15(2)13-23-19(21)10-11-20(22)24-14-16-8-9-17-6-4-5-7-18(17

InchiKey: MJOFDSVJAALWCH-UHFFFAOYSA-N

Formula: C20H24O4

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

Mol. weight [g/mol]: 328.40

Physical Properties

Property code	Value	Unit	Source
gf	-143.33	kJ/mol	Joback Method
hf	-534.88	kJ/mol	Joback Method
hfus	40.28	kJ/mol	Joback Method
hvap	82.62	kJ/mol	Joback Method
log10ws	-5.41		Crippen Method
logp	4.253		Crippen Method
mcvol	264.320	ml/mol	McGowan Method
pc	1629.85	kPa	Joback Method
rinpol	2698.00		NIST Webbook
rinpol	2698.00		NIST Webbook
tb	859.78	K	Joback Method
tc	1076.09	K	Joback Method
tf	516.12	K	Joback Method
vc	1.012	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	803.39	J/mol×K	859.78	Joback Method
cpg	818.05	J/mol×K	895.83	Joback Method
cpg	831.60	J/mol×K	931.88	Joback Method
cpg	844.10	J/mol×K	967.94	Joback Method
cpg	855.60	J/mol×K	1003.99	Joback Method
cpg	866.15	J/mol×K	1040.04	Joback Method
cpg	875.79	J/mol×K	1076.09	Joback Method
dvisc	0.0007738	Pa×s	516.12	Joback Method

dvisc	0.0004631	Pa×s	573.40	Joback Method
dvisc	0.0003042	Pa×s	630.67	Joback Method
dvisc	0.0002143	Pa×s	687.95	Joback Method
dvisc	0.0001594	Pa×s	745.23	Joback Method
dvisc	0.0001236	Pa×s	802.50	Joback Method
dvisc	0.0000992	Pa×s	859.78	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=U389642&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

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