Succinic acid, 2-naphthylmethyl propyl ester

Inchi: InChI=1S/C18H20O4/c1-2-11-21-17(19)9-10-18(20)22-13-14-7-8-15-5-3-4-6-16(15)12-14
InchiKey: PLKXPRPKMQAZRJ-UHFFFAOYSA-N
Formula: C18H20O4
SMILES: CCCOC(=O)CCC(=O)OCc1ccc2ccccc2c1
Mol. weight [g/mol]: 300.35

Physical Properties

Property code	Value	Unit	Source
gf	-157.73	kJ/mol	Joback Method
hf	-488.32	kJ/mol	Joback Method
hfus	38.62	kJ/mol	Joback Method
hvap	78.55	kJ/mol	Joback Method
log10ws	-4.81		Crippen Method
logp	3.616		Crippen Method
mcvol	236.140	ml/mol	McGowan Method
pc	1901.92	kPa	Joback Method
rinpol	2420.00		NIST Webbook
rinpol	2420.00		NIST Webbook
tb	814.46	K	Joback Method
tc	1031.08	K	Joback Method
tf	508.58	K	Joback Method
vc	0.905	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	688.97	J/mol×K	814.46	Joback Method
cpg	703.01	J/mol×K	850.56	Joback Method
cpg	716.02	J/mol×K	886.67	Joback Method
cpg	728.05	J/mol×K	922.77	Joback Method
cpg	739.13	J/mol×K	958.87	Joback Method
cpg	749.31	J/mol×K	994.98	Joback Method
cpg	758.63	J/mol×K	1031.08	Joback Method
dvisc	0.0008334	Pa×s	508.58	Joback Method

dvisc	0.0005396	Pa×s	559.56	Joback Method
dvisc	0.0003757	Pa×s	610.54	Joback Method
dvisc	0.0002766	Pa×s	661.52	Joback Method
dvisc	0.0002127	Pa×s	712.50	Joback Method
dvisc	0.0001695	Pa×s	763.48	Joback Method
dvisc	0.0001389	Pa×s	814.46	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=U389980&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