Succinic acid, 2,2-dichloroethyl 2-naphthylmethyl ester

Inchi: InChI=1S/C17H16Cl2O4/c18-15(19)11-23-17(21)8-7-16(20)22-10-12-5-6-13-3-1-2-4-14(1

InchiKey: IRNAXKBUXAHRGJ-UHFFFAOYSA-N

Formula: C17H16Cl2O4

SMILES: O=C(CCC(=O)OCC(Cl)Cl)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 355.21

Physical Properties

Property code	Value	Unit	Source
gf	-192.45	kJ/mol	Joback Method
hf	-504.44	kJ/mol	Joback Method
hfus	40.90	kJ/mol	Joback Method
hvap	84.71	kJ/mol	Joback Method
log10ws	-5.31		Crippen Method
logp	4.010		Crippen Method
mcvol	246.530	ml/mol	McGowan Method
pc	1952.68	kPa	Joback Method
rinpol	2767.00		NIST Webbook
rinpol	2767.00		NIST Webbook
tb	866.00	K	Joback Method
tc	1094.35	K	Joback Method
tf	542.15	K	Joback Method
vc	0.942	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	679.74	J/mol×K	866.00	Joback Method
cpg	691.31	J/mol×K	904.06	Joback Method
cpg	701.87	J/mol×K	942.12	Joback Method
cpg	711.49	J/mol×K	980.18	Joback Method
cpg	720.22	J/mol×K	1018.24	Joback Method
cpg	728.10	J/mol×K	1056.30	Joback Method
cpg	735.20	J/mol×K	1094.35	Joback Method
dvisc	0.0007373	Pa×s	542.15	Joback Method

dvisc	0.0004687	Pa×s	596.13	Joback Method
dvisc	0.0003212	Pa×s	650.10	Joback Method
dvisc	0.0002333	Pa×s	704.08	Joback Method
dvisc	0.0001773	Pa×s	758.05	Joback Method
dvisc	0.0001398	Pa×s	812.03	Joback Method
dvisc	0.0001135	Pa×s	866.00	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390000&Units=SI
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

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