Succinic acid, 2,2-dichloroethyl diphenylmethyl ester

Inchi: InChI=1S/C19H18Cl2O4/c20-16(21)13-24-17(22)11-12-18(23)25-19(14-7-3-1-4-8-14)15-

InchiKey: CVFDKKKKENSHAP-UHFFFAOYSA-N

Formula: C19H18Cl2O4

SMILES: O=C(CCC(=O)OC(c1ccccc1)c1ccccc1)OCC(Cl)Cl

Mol. weight [g/mol]: 381.25

Physical Properties

Property code	Value	Unit	Source
gf	-162.66	kJ/mol	Joback Method
hf	-494.07	kJ/mol	Joback Method
hfus	39.97	kJ/mol	Joback Method
hvap	88.75	kJ/mol	Joback Method
log10ws	-5.18		Crippen Method
logp	4.446		Crippen Method
mcvol	270.410	ml/mol	McGowan Method
pc	1816.95	kPa	Joback Method
rinpol	2685.00		NIST Webbook
rinpol	2685.00		NIST Webbook
tb	914.04	K	Joback Method
tc	1151.53	K	Joback Method
tf	530.89	K	Joback Method
vc	1.018	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	771.55	J/mol×K	914.04	Joback Method
cpg	783.18	J/mol×K	953.62	Joback Method
cpg	793.52	J/mol×K	993.20	Joback Method
cpg	802.60	J/mol×K	1032.78	Joback Method
cpg	810.50	J/mol×K	1072.37	Joback Method
cpg	817.27	J/mol×K	1111.95	Joback Method
cpg	822.96	J/mol×K	1151.53	Joback Method
dvisc	0.0005412	Pa×s	530.89	Joback Method

dvisc	0.0002765	Pa×s	594.75	Joback Method
dvisc	0.0001609	Pa×s	658.61	Joback Method
dvisc	0.0001030	Pa×s	722.47	Joback Method
dvisc	0.0000709	Pa×s	786.32	Joback Method
dvisc	0.0000516	Pa×s	850.18	Joback Method
dvisc	0.0000393	Pa×s	914.04	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390168&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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