Succinic acid, 2,2-dichloroethyl dec-9-en-1-yl ester

Inchi: InChI=1S/C16H26Cl2O4/c1-2-3-4-5-6-7-8-9-12-21-15(19)10-11-16(20)22-13-14(17)18/h2

InchiKey: ZLXXYRQBDJQWNJ-UHFFFAOYSA-N

Formula: C16H26Cl2O4

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

Mol. weight [g/mol]: 353.28

Physical Properties

Property code	Value	Unit	Source
gf	-322.46	kJ/mol	Joback Method
hf	-774.50	kJ/mol	Joback Method
hfus	46.36	kJ/mol	Joback Method
hvap	77.23	kJ/mol	Joback Method
log10ws	-5.01		Crippen Method
logp	4.573		Crippen Method
mcvol	271.360	ml/mol	McGowan Method
pc	1386.08	kPa	Joback Method
rinpol	2342.00		NIST Webbook
rinpol	2342.00		NIST Webbook
tb	789.16	K	Joback Method
tc	978.97	K	Joback Method
tf	457.48	K	Joback Method
vc	1.052	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	768.47	J/mol×K	789.16	Joback Method
cpg	782.89	J/mol×K	820.79	Joback Method
cpg	796.43	J/mol×K	852.43	Joback Method
cpg	809.10	J/mol×K	884.06	Joback Method
cpg	820.92	J/mol×K	915.70	Joback Method
cpg	831.91	J/mol×K	947.33	Joback Method
cpg	842.07	J/mol×K	978.97	Joback Method
dvisc	0.0009618	Pa×s	457.48	Joback Method

dvisc	0.0004892	Pa×s	512.76	Joback Method
dvisc	0.0002838	Pa×s	568.04	Joback Method
dvisc	0.0001813	Pa×s	623.32	Joback Method
dvisc	0.0001246	Pa×s	678.60	Joback Method
dvisc	0.0000906	Pa×s	733.88	Joback Method
dvisc	0.0000689	Pa×s	789.16	Joback Method

Sources

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=U391249&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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