Succinic acid, 2,2-dichloroethyl 2,2,2-trichloroethyl ester

Inchi: InChI=1S/C8H9Cl5O4/c9-5(10)3-16-6(14)1-2-7(15)17-4-8(11,12)13/h5H,1-4H2

InchiKey: DNAYOKRJOZXYBX-UHFFFAOYSA-N

Formula: C8H9Cl5O4

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

Mol. weight [g/mol]: 346.42

Physical Properties

Property code	Value	Unit	Source
gf	-510.61	kJ/mol	Joback Method
hf	-790.78	kJ/mol	Joback Method
hfus	32.10	kJ/mol	Joback Method
hvap	71.95	kJ/mol	Joback Method
log10ws	-3.37		Crippen Method
logp	3.027		Crippen Method
mcvol	199.660	ml/mol	McGowan Method
pc	2374.90	kPa	Joback Method
rinpol	1910.00		NIST Webbook
rinpol	1910.00		NIST Webbook
tb	718.50	K	Joback Method
tc	935.97	K	Joback Method
tf	461.26	K	Joback Method
vc	0.759	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	441.93	J/mol×K	718.50	Joback Method
cpg	450.39	J/mol×K	754.74	Joback Method
cpg	458.16	J/mol×K	790.99	Joback Method
cpg	465.25	J/mol×K	827.23	Joback Method
cpg	471.70	J/mol×K	863.48	Joback Method
cpg	477.50	J/mol×K	899.72	Joback Method
cpg	482.70	J/mol×K	935.97	Joback Method
dvisc	0.0010757	Pa×s	461.26	Joback Method

dvisc	0.0006261	Pa×s	504.13	Joback Method
dvisc	0.0003967	Pa×s	547.01	Joback Method
dvisc	0.0002686	Pa×s	589.88	Joback Method
dvisc	0.0001917	Pa×s	632.75	Joback Method
dvisc	0.0001428	Pa×s	675.63	Joback Method
dvisc	0.0001102	Pa×s	718.50	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=U390233&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