Succinic acid, 8-chlorooctyl 10-chlorodecyl ester

Inchi: InChI=1S/C22H40Cl2O4/c23-17-11-7-3-1-2-5-9-13-19-27-21(25)15-16-22(26)28-20-14-1

InchiKey: CYFPZPJELSJRGZ-UHFFFAOYSA-N

Formula: C22H40Cl2O4

SMILES: O=C(CCC(=O)OCCCCCCCCCCCCl)OCCCCCCCCCCl

Mol. weight [g/mol]: 439.46

Physical Properties

Property code	Value	Unit	Source
gf	-357.34	kJ/mol	Joback Method
hf	-1018.49	kJ/mol	Joback Method
hfus	66.70	kJ/mol	Joback Method
hvap	91.65	kJ/mol	Joback Method
log10ws	-7.06		Crippen Method
logp	6.792		Crippen Method
mcvol	360.200	ml/mol	McGowan Method
pc	911.63	kPa	Joback Method
rinpol	3212.00		NIST Webbook
rinpol	3212.00		NIST Webbook
tb	930.20	K	Joback Method
tc	1139.78	K	Joback Method
tf	541.86	K	Joback Method
vc	1.413	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.63	J/mol×K	930.20	Joback Method
cpg	1226.25	J/mol×K	1104.85	Joback Method
cpg	1214.05	J/mol×K	1069.92	Joback Method
cpg	1200.62	J/mol×K	1034.99	Joback Method
cpg	1185.94	J/mol×K	1000.06	Joback Method
cpg	1169.95	J/mol×K	965.13	Joback Method
cpg	1237.26	J/mol×K	1139.78	Joback Method
dvisc	0.0000282	Pa×s	930.20	Joback Method

dvisc	0.0000373	Pa×s	865.48	Joback Method
dvisc	0.0000515	Pa×s	800.75	Joback Method
dvisc	0.0000753	Pa×s	736.03	Joback Method
dvisc	0.0001185	Pa×s	671.31	Joback Method
dvisc	0.0002054	Pa×s	606.58	Joback Method
dvisc	0.0004061	Pa×s	541.86	Joback Method

Sources

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=U390418&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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