Succinic acid, 8-chloroctyl undecyl ester

Inchi: InChI=1S/C23H43ClO4/c1-2-3-4-5-6-7-9-12-15-20-27-22(25)17-18-23(26)28-21-16-13-10
InchiKey: NVFCUSHECQHION-UHFFFAOYSA-N
Formula: C23H43ClO4
SMILES: CCCCCCCCCCCOC(=O)CCC(=O)OCCCCCCCCCl
Mol. weight [g/mol]: 419.04

Physical Properties

Property code	Value	Unit	Source
gf	-336.99	kJ/mol	Joback Method
hf	-1023.39	kJ/mol	Joback Method
hfus	65.10	kJ/mol	Joback Method
hvap	89.49	kJ/mol	Joback Method
log10ws	-7.33		Crippen Method
logp	6.963		Crippen Method
mcvol	362.050	ml/mol	McGowan Method
pc	880.00	kPa	Joback Method
rinpol	2948.00		NIST Webbook
rinpol	2948.00		NIST Webbook
tb	915.65	K	Joback Method
tc	1122.22	K	Joback Method
tf	523.21	K	Joback Method
vc	1.421	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1185.72	J/mol×K	915.65	Joback Method
cpg	1204.47	J/mol×K	950.08	Joback Method
cpg	1221.85	J/mol×K	984.51	Joback Method
cpg	1237.89	J/mol×K	1018.94	Joback Method
cpg	1252.63	J/mol×K	1053.37	Joback Method
cpg	1266.11	J/mol×K	1087.80	Joback Method
cpg	1278.36	J/mol×K	1122.22	Joback Method
dvisc	0.0004614	Pa×s	523.21	Joback Method

dvisc	0.0002249	Pa×s	588.62	Joback Method
dvisc	0.0001265	Pa×s	654.02	Joback Method
dvisc	0.0000791	Pa×s	719.43	Joback Method
dvisc	0.0000534	Pa×s	784.84	Joback Method
dvisc	0.0000383	Pa×s	850.24	Joback Method
dvisc	0.0000289	Pa×s	915.65	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=U349294&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