Succinic acid, 10-chlorodecyl pentadecyl ester

Inchi: InChI=1S/C29H55ClO4/c1-2-3-4-5-6-7-8-9-10-12-15-18-21-26-33-28(31)23-24-29(32)34-
InchiKey: BZGKRDYXVBGXAR-UHFFFAOYSA-N
Formula: C29H55ClO4
SMILES: CCCCCCCCCCCCCCCCOC(=O)CCC(=O)OCCCCCCCCCCCCl
Mol. weight [g/mol]: 503.20

Physical Properties

Property code	Value	Unit	Source
gf	-286.47	kJ/mol	Joback Method
hf	-1147.23	kJ/mol	Joback Method
hfus	80.64	kJ/mol	Joback Method
hvap	102.84	kJ/mol	Joback Method
log10ws	-9.84		Crippen Method
logp	9.304		Crippen Method
mcvol	446.590	ml/mol	McGowan Method
pc	641.90	kPa	Joback Method
rinpol	3587.00		NIST Webbook
tb	1052.93	K	Joback Method
tc	1322.23	K	Joback Method
tf	590.83	K	Joback Method
vc	1.756	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1568.65	J/mol×K	1052.93	Joback Method
cpg	1591.19	J/mol×K	1097.81	Joback Method
cpg	1611.29	J/mol×K	1142.70	Joback Method
cpg	1629.07	J/mol×K	1187.58	Joback Method
cpg	1644.63	J/mol×K	1232.46	Joback Method
cpg	1658.10	J/mol×K	1277.35	Joback Method
cpg	1669.60	J/mol×K	1322.23	Joback Method
dvisc	0.0002084	Pa×s	590.83	Joback Method
dvisc	0.0000964	Pa×s	667.85	Joback Method

dvisc	0.0000523	Pa×s	744.86	Joback Method
dvisc	0.0000318	Pa×s	821.88	Joback Method
dvisc	0.0000211	Pa×s	898.90	Joback Method
dvisc	0.0000149	Pa×s	975.91	Joback Method
dvisc	0.0000111	Pa×s	1052.93	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U349194&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