Succinic acid, 2,2,3,3,4,4,5,5-octafluoropentyl 10-chlorodecyl ester

Inchi: InChI=1S/C19H27ClF8O4/c20-11-7-5-3-1-2-4-6-8-12-31-14(29)9-10-15(30)32-13-17(23,2

InchiKey: FOFXYAGYYNKSKT-UHFFFAOYSA-N

Formula: C19H27ClF8O4

SMILES: O=C(CCC(=O)OCC(F)(F)C(F)(F)C(F)(F)C(F)F)OCCCCCCCCCCCCl

Mol. weight [g/mol]: 506.86

Physical Properties

Property code	Value	Unit	Source
gf	-1923.07	kJ/mol	Joback Method
hf	-2541.24	kJ/mol	Joback Method
hfus	53.61	kJ/mol	Joback Method
hvap	69.77	kJ/mol	Joback Method
log10ws	-6.91		Crippen Method
logp	6.384		Crippen Method
mcvol	319.850	ml/mol	McGowan Method
pc	928.37	kPa	Joback Method
rinpol	2314.00		NIST Webbook
tb	808.16	K	Joback Method
tc	989.50	K	Joback Method
tf	475.11	K	Joback Method
vc	1.302	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1003.99	J/mol×K	808.16	Joback Method
cpg	1018.99	J/mol×K	838.38	Joback Method
cpg	1033.03	J/mol×K	868.61	Joback Method
cpg	1046.17	J/mol×K	898.83	Joback Method
cpg	1058.47	J/mol×K	929.06	Joback Method
cpg	1069.99	J/mol×K	959.28	Joback Method
cpg	1080.78	J/mol×K	989.50	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390403&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

Legend

cpg:	Ideal gas heat capacity
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