Succinic acid, 2,2,3,3-tetrafluoropropyl 10-chlorodecyl ester

Inchi: InChI=1S/C17H27ClF4O4/c18-11-7-5-3-1-2-4-6-8-12-25-14(23)9-10-15(24)26-13-17(21,2

InchiKey: AZMSRVAPSONVBE-UHFFFAOYSA-N

Formula: C17H27ClF4O4

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

Mol. weight [g/mol]: 406.84

Physical Properties

Property code	Value	Unit	Source
gf	-1166.35	kJ/mol	Joback Method
hf	-1698.02	kJ/mol	Joback Method
hfus	50.94	kJ/mol	Joback Method
hvap	71.18	kJ/mol	Joback Method
log10ws	-5.44		Crippen Method
logp	5.113		Crippen Method
mcvol	284.590	ml/mol	McGowan Method
pc	1150.65	kPa	Joback Method
rinpol	2239.00		NIST Webbook
rinpol	2239.00		NIST Webbook
tb	771.78	K	Joback Method
tc	947.68	K	Joback Method
tf	445.37	K	Joback Method
vc	1.139	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	854.94	J/mol×K	771.78	Joback Method
cpg	869.92	J/mol×K	801.10	Joback Method
cpg	884.03	J/mol×K	830.41	Joback Method
cpg	897.30	J/mol×K	859.73	Joback Method
cpg	909.76	J/mol×K	889.05	Joback Method
cpg	921.43	J/mol×K	918.37	Joback Method
cpg	932.33	J/mol×K	947.68	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390402&Units=SI

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