Succinic acid, 2,2,3,3,4,4,5,5-octafluoropentyl 8-chlorooctyl ester

Inchi: InChI=1S/C17H23ClF8O4/c18-9-5-3-1-2-4-6-10-29-12(27)7-8-13(28)30-11-15(21,22)17(2

InchiKey: VEUDGJUTUHYTEP-UHFFFAOYSA-N

Formula: C17H23ClF8O4

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

Mol. weight [g/mol]: 478.80

Physical Properties

Property code	Value	Unit	Source
gf	-1939.91	kJ/mol	Joback Method
hf	-2499.96	kJ/mol	Joback Method
hfus	48.43	kJ/mol	Joback Method
hvap	65.32	kJ/mol	Joback Method
log10ws	-6.07		Crippen Method
logp	5.603		Crippen Method
mcvol	291.670	ml/mol	McGowan Method
pc	1047.33	kPa	Joback Method
rinpol	2123.00		NIST Webbook
rinpol	2123.00		NIST Webbook
tb	762.40	K	Joback Method
tc	934.37	K	Joback Method
tf	452.57	K	Joback Method
vc	1.190	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	888.99	J/mol×K	762.40	Joback Method
cpg	902.88	J/mol×K	791.06	Joback Method
cpg	915.92	J/mol×K	819.72	Joback Method
cpg	928.14	J/mol×K	848.38	Joback Method
cpg	939.60	J/mol×K	877.04	Joback Method
cpg	950.34	J/mol×K	905.71	Joback Method
cpg	960.41	J/mol×K	934.37	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=U390487&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