Succinic acid, 2,2,3,3-tetrafluoropropyl 2-ethoxyethyl ester

Inchi: InChI=1S/C11H16F4O5/c1-2-18-5-6-19-8(16)3-4-9(17)20-7-11(14,15)10(12)13/h10H,2-7

InchiKey: ODFBBAUIXDSJEO-UHFFFAOYSA-N

Formula: C11H16F4O5

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

Mol. weight [g/mol]: 304.24

Physical Properties

Property code	Value	Unit	Source
gf	-1309.94	kJ/mol	Joback Method
hf	-1690.66	kJ/mol	Joback Method
hfus	32.39	kJ/mol	Joback Method
hvap	55.85	kJ/mol	Joback Method
log10ws	-1.87		Crippen Method
logp	1.790		Crippen Method
mcvol	193.680	ml/mol	McGowan Method
pc	1807.70	kPa	Joback Method
rinpol	1450.00		NIST Webbook
tb	619.49	K	Joback Method
tc	783.32	K	Joback Method
tf	370.06	K	Joback Method
vc	0.772	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	527.40	J/mol×K	619.49	Joback Method
cpg	539.86	J/mol×K	646.79	Joback Method
cpg	551.74	J/mol×K	674.10	Joback Method
cpg	563.06	J/mol×K	701.40	Joback Method
cpg	573.80	J/mol×K	728.71	Joback Method
cpg	583.99	J/mol×K	756.01	Joback Method
cpg	593.61	J/mol×K	783.32	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390660&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
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