Succinic acid, 2,2,3,3-tetrafluoropropyl non-3-en-1-yl ester

Inchi: InChI=1S/C16H24F4O4/c1-2-3-4-5-6-7-8-11-23-13(21)9-10-14(22)24-12-16(19,20)15(17
InchiKey: OWGPQLTUSBYTEA-VOTSOKGWSA-N
Formula: C16H24F4O4
SMILES: CCCCCC=CCCOC(=O)CCC(=O)OCC(F)(F)C(F)F
Mol. weight [g/mol]: 356.35

Physical Properties

Property code	Value	Unit	Source
gf	-1082.62	kJ/mol	Joback Method
hf	-1544.42	kJ/mol	Joback Method
hfus	44.35	kJ/mol	Joback Method
hvap	64.53	kJ/mol	Joback Method
log10ws	-4.73		Crippen Method
logp	4.280		Crippen Method
mcvol	253.960	ml/mol	McGowan Method
pc	1309.90	kPa	Joback Method
rinpol	1834.00		NIST Webbook
rinpol	1834.00		NIST Webbook
tb	715.63	K	Joback Method
tc	886.00	K	Joback Method
tf	399.10	K	Joback Method
vc	1.014	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	744.16	J/mol×K	715.63	Joback Method
cpg	758.86	J/mol×K	744.03	Joback Method
cpg	772.79	J/mol×K	772.42	Joback Method
cpg	785.96	J/mol×K	800.82	Joback Method
cpg	798.41	J/mol×K	829.21	Joback Method
cpg	810.17	J/mol×K	857.61	Joback Method
cpg	821.25	J/mol×K	886.00	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391091&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