Succinic acid, 2,2,3,3-tetrafluoropropyl 2,2,3,4,4,4-hexafluorobutyl ester

Inchi: InChI=1S/C11H10F10O4/c12-7(11(19,20)21)9(15,16)3-24-5(22)1-2-6(23)25-4-10(17,18)8

InchiKey: ADPMFWAGJQXSFD-UHFFFAOYSA-N

Formula: C11H10F10O4

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

Mol. weight [g/mol]: 396.18

Physical Properties

Property code	Value	Unit	Source
gf	-2370.56	kJ/mol	Joback Method
hf	-2757.88	kJ/mol	Joback Method
hfus	31.33	kJ/mol	Joback Method
hvap	45.56	kJ/mol	Joback Method
log10ws	-3.72		Crippen Method
logp	3.289		Crippen Method
mcvol	198.430	ml/mol	McGowan Method
pc	1527.07	kPa	Joback Method
rinpol	1240.00		NIST Webbook
rinpol	1240.00		NIST Webbook
tb	585.79	K	Joback Method
tc	733.14	K	Joback Method
tf	341.21	K	Joback Method
vc	0.835	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	556.69	J/mol×K	585.79	Joback Method
cpg	567.95	J/mol×K	610.35	Joback Method
cpg	578.57	J/mol×K	634.91	Joback Method
cpg	588.59	J/mol×K	659.47	Joback Method
cpg	598.04	J/mol×K	684.03	Joback Method
cpg	606.92	J/mol×K	708.59	Joback Method
cpg	615.27	J/mol×K	733.14	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390798&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