Succinic acid, 2,2,3,3,4,4,5,5-octafluoropentyl tetrahydrofurfuryl ester

Inchi: InChI=1S/C14H16F8O5/c15-11(16)13(19,20)14(21,22)12(17,18)7-27-10(24)4-3-9(23)26-

InchiKey: PTAYAVGODXFTFN-UHFFFAOYSA-N

Formula: C14H16F8O5

SMILES: O=C(CCC(=O)OCC(F)(F)C(F)(F)C(F)(F)C(F)F)OCC1CCCO1

Mol. weight [g/mol]: 416.26

Physical Properties

Property code	Value	Unit	Source
gf	-2002.81	kJ/mol	Joback Method
hf	-2493.82	kJ/mol	Joback Method
hfus	38.38	kJ/mol	Joback Method
hvap	59.03	kJ/mol	Joback Method
log10ws	-3.76		Crippen Method
logp	3.203		Crippen Method
mcvol	232.170	ml/mol	McGowan Method
pc	1486.14	kPa	Joback Method
rinpol	1746.00		NIST Webbook
rinpol	1746.00		NIST Webbook
tb	698.56	K	Joback Method
tc	870.58	K	Joback Method
tf	426.31	K	Joback Method
vc	0.934	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	716.92	J/mol×K	698.56	Joback Method
cpg	730.48	J/mol×K	727.23	Joback Method
cpg	743.15	J/mol×K	755.90	Joback Method
cpg	754.96	J/mol×K	784.57	Joback Method
cpg	765.96	J/mol×K	813.24	Joback Method
cpg	776.20	J/mol×K	841.91	Joback Method
cpg	785.72	J/mol×K	870.58	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=U390712&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