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

Inchi: InChI=1S/C13H16F8O5/c1-2-24-5-6-25-8(22)3-4-9(23)26-7-11(16,17)13(20,21)12(18,19)

InchiKey: KUIDTEBTQUUFRM-UHFFFAOYSA-N

Formula: C13H16F8O5

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

Mol. weight [g/mol]: 404.25

Physical Properties

Property code	Value	Unit	Source
gf	-2066.66	kJ/mol	Joback Method
hf	-2533.88	kJ/mol	Joback Method
hfus	35.06	kJ/mol	Joback Method
hvap	54.44	kJ/mol	Joback Method
log10ws	-3.33		Crippen Method
logp	3.061		Crippen Method
mcvol	228.940	ml/mol	McGowan Method
pc	1386.08	kPa	Joback Method
rinpol	1541.00		NIST Webbook
rinpol	1541.00		NIST Webbook
tb	655.87	K	Joback Method
tc	813.60	K	Joback Method
tf	399.80	K	Joback Method
vc	0.934	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	668.84	J/mol×K	655.87	Joback Method
cpg	681.45	J/mol×K	682.16	Joback Method
cpg	693.35	J/mol×K	708.45	Joback Method
cpg	704.56	J/mol×K	734.73	Joback Method
cpg	715.12	J/mol×K	761.02	Joback Method
cpg	725.05	J/mol×K	787.31	Joback Method
cpg	734.37	J/mol×K	813.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390661&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