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

Inchi: InChI=1S/C12H14F8O5/c1-23-4-5-24-7(21)2-3-8(22)25-6-10(15,16)12(19,20)11(17,18)9(

InchiKey: YOBMXOVJRDSJBI-UHFFFAOYSA-N

Formula: C12H14F8O5

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

Mol. weight [g/mol]: 390.22

Physical Properties

Property code	Value	Unit	Source
gf	-2075.08	kJ/mol	Joback Method
hf	-2513.24	kJ/mol	Joback Method
hfus	32.47	kJ/mol	Joback Method
hvap	52.22	kJ/mol	Joback Method
log10ws	-2.91		Crippen Method
logp	2.670		Crippen Method
mcvol	214.850	ml/mol	McGowan Method
pc	1490.74	kPa	Joback Method
rinpol	1487.00		NIST Webbook
rinpol	1487.00		NIST Webbook
tb	632.99	K	Joback Method
tc	789.39	K	Joback Method
tf	388.53	K	Joback Method
vc	0.878	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	616.83	J/mol×K	632.99	Joback Method
cpg	628.93	J/mol×K	659.06	Joback Method
cpg	640.35	J/mol×K	685.12	Joback Method
cpg	651.13	J/mol×K	711.19	Joback Method
cpg	661.27	J/mol×K	737.26	Joback Method
cpg	670.81	J/mol×K	763.32	Joback Method
cpg	679.77	J/mol×K	789.39	Joback Method

Sources

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=U390732&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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