Succinic acid, 2,2,3,3-tetrafluoropropyl 2-methoxyethyl ester

Inchi: InChI=1S/C10H14F4O5/c1-17-4-5-18-7(15)2-3-8(16)19-6-10(13,14)9(11)12/h9H,2-6H2,1

InchiKey: GGCHQRRJJCOTLJ-UHFFFAOYSA-N

Formula: C10H14F4O5

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

Mol. weight [g/mol]: 290.21

Physical Properties

Property code	Value	Unit	Source
gf	-1318.36	kJ/mol	Joback Method
hf	-1670.02	kJ/mol	Joback Method
hfus	29.80	kJ/mol	Joback Method
hvap	53.62	kJ/mol	Joback Method
log10ws	-1.45		Crippen Method
logp	1.400		Crippen Method
mcvol	179.590	ml/mol	McGowan Method
pc	1964.82	kPa	Joback Method
rinpol	1399.00		NIST Webbook
rinpol	1399.00		NIST Webbook
tb	596.61	K	Joback Method
tc	760.59	K	Joback Method
tf	358.79	K	Joback Method
vc	0.717	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	477.59	J/mol×K	596.61	Joback Method
cpg	489.40	J/mol×K	623.94	Joback Method
cpg	500.67	J/mol×K	651.27	Joback Method
cpg	511.42	J/mol×K	678.60	Joback Method
cpg	521.64	J/mol×K	705.93	Joback Method
cpg	531.35	J/mol×K	733.26	Joback Method
cpg	540.53	J/mol×K	760.59	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390731&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