Succinic acid, 2,2,3,3-tetrafluoropropyl dec-9-en-1-yl ester

Inchi: InChI=1S/C17H26F4O4/c1-2-3-4-5-6-7-8-9-12-24-14(22)10-11-15(23)25-13-17(20,21)16

InchiKey: RYLRIHVOOPEYHT-UHFFFAOYSA-N

Formula: C17H26F4O4

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

Mol. weight [g/mol]: 370.38

Physical Properties

Property code	Value	Unit	Source
gf	-1066.58	kJ/mol	Joback Method
hf	-1556.85	kJ/mol	Joback Method
hfus	45.46	kJ/mol	Joback Method
hvap	66.13	kJ/mol	Joback Method
log10ws	-5.15		Crippen Method
logp	4.670		Crippen Method
mcvol	268.050	ml/mol	McGowan Method
pc	1214.90	kPa	Joback Method
rinpol	1979.00		NIST Webbook
rinpol	1979.00		NIST Webbook
tb	731.03	K	Joback Method
tc	900.91	K	Joback Method
tf	413.69	K	Joback Method
vc	1.071	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	799.11	J/mol×K	731.03	Joback Method
cpg	814.32	J/mol×K	759.34	Joback Method
cpg	828.72	J/mol×K	787.66	Joback Method
cpg	842.33	J/mol×K	815.97	Joback Method
cpg	855.18	J/mol×K	844.28	Joback Method
cpg	867.28	J/mol×K	872.60	Joback Method
cpg	878.66	J/mol×K	900.91	Joback Method

Sources

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=U391246&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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