Succinic acid, 2,2,3,3-tetrafluoropropyl 4-biphenyl ester

Inchi: InChI=1S/C19H16F4O4/c20-18(21)19(22,23)12-26-16(24)10-11-17(25)27-15-8-6-14(7-9-

InchiKey: RUDPPRPDFGPAIO-UHFFFAOYSA-N

Formula: C19H16F4O4

SMILES: O=C(CCC(=O)Oc1ccc(-c2ccccc2)cc1)OCC(F)(F)C(F)F

Mol. weight [g/mol]: 384.32

Physical Properties

Property code	Value	Unit	Source
gf	-922.39	kJ/mol	Joback Method
hf	-1261.97	kJ/mol	Joback Method
hfus	39.62	kJ/mol	Joback Method
hvap	76.46	kJ/mol	Joback Method
log10ws	-5.97		Crippen Method
logp	4.483		Crippen Method
mcvol	253.010	ml/mol	McGowan Method
pc	1657.84	kPa	Joback Method
rinpol	2477.00		NIST Webbook
rinpol	2477.00		NIST Webbook
tb	838.45	K	Joback Method
tc	1048.87	K	Joback Method
tf	503.35	K	Joback Method
vc	0.987	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	756.16	J/mol×K	838.45	Joback Method
cpg	768.60	J/mol×K	873.52	Joback Method
cpg	779.95	J/mol×K	908.59	Joback Method
cpg	790.27	J/mol×K	943.66	Joback Method
cpg	799.59	J/mol×K	978.73	Joback Method
cpg	807.99	J/mol×K	1013.80	Joback Method
cpg	815.51	J/mol×K	1048.87	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=U390079&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