Succinic acid, dec-2-yl pentafluorophenyl ester

Inchi: InChI=1S/C20H25F5O4/c1-3-4-5-6-7-8-9-12(2)28-13(26)10-11-14(27)29-20-18(24)16(22
InchiKey: MONVOEABBJSGFK-UHFFFAOYSA-N
Formula: C20H25F5O4
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)Oc1c(F)c(F)c(F)c(F)c1F
Mol. weight [g/mol]: 424.40

Physical Properties

Property code	Value	Unit	Source
gf	-1262.55	kJ/mol	Joback Method
hf	-1752.38	kJ/mol	Joback Method
hfus	57.10	kJ/mol	Joback Method
hvap	79.54	kJ/mol	Joback Method
log10ws	-7.44		Crippen Method
logp	5.750		Crippen Method
mcvol	292.630	ml/mol	McGowan Method
pc	1105.94	kPa	Joback Method
rinpol	2108.00		NIST Webbook
rinpol	2108.00		NIST Webbook
tb	857.07	K	Joback Method
tc	1049.66	K	Joback Method
tf	536.45	K	Joback Method
vc	1.179	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	912.14	J/mol×K	857.07	Joback Method
cpg	926.58	J/mol×K	889.17	Joback Method
cpg	939.96	J/mol×K	921.27	Joback Method
cpg	952.29	J/mol×K	953.37	Joback Method
cpg	963.58	J/mol×K	985.46	Joback Method
cpg	973.83	J/mol×K	1017.56	Joback Method
cpg	983.04	J/mol×K	1049.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390354&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