Succinic acid, dec-2-yl 2,2,3,3,3-pentafluoropropyl ester

Inchi: InChI=1S/C17H27F5O4/c1-3-4-5-6-7-8-9-13(2)26-15(24)11-10-14(23)25-12-16(18,19)17

InchiKey: OCUOOAJELAMQSL-UHFFFAOYSA-N

Formula: C17H27F5O4

SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OCC(F)(F)C(F)(F)F

Mol. weight [g/mol]: 390.39

Physical Properties

Property code	Value	Unit	Source
gf	-1346.39	kJ/mol	Joback Method
hf	-1887.14	kJ/mol	Joback Method
hfus	42.41	kJ/mol	Joback Method
hvap	64.68	kJ/mol	Joback Method
log10ws	-5.75		Crippen Method
logp	5.190		Crippen Method
mcvol	274.120	ml/mol	McGowan Method
pc	1159.29	kPa	Joback Method
rinpol	1711.00		NIST Webbook
rinpol	1711.00		NIST Webbook
tb	730.39	K	Joback Method
tc	899.66	K	Joback Method
tf	418.46	K	Joback Method
vc	1.097	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	833.74	J/mol×K	730.39	Joback Method
cpg	849.24	J/mol×K	758.60	Joback Method
cpg	863.89	J/mol×K	786.81	Joback Method
cpg	877.72	J/mol×K	815.03	Joback Method
cpg	890.75	J/mol×K	843.24	Joback Method
cpg	903.03	J/mol×K	871.45	Joback Method
cpg	914.58	J/mol×K	899.66	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390872&Units=SI

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