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

Inchi: InChI=1S/C17H14F4O4/c18-16(19)17(20,21)10-24-14(22)7-8-15(23)25-13-6-5-11-3-1-2-

InchiKey: JTUNVSOIEJTBOK-UHFFFAOYSA-N

Formula: C17H14F4O4

SMILES: O=C(CCC(=O)Oc1ccc2ccccc2c1)OCC(F)(F)C(F)F

Mol. weight [g/mol]: 358.28

Physical Properties

Property code	Value	Unit	Source
gf	-944.99	kJ/mol	Joback Method
hf	-1266.15	kJ/mol	Joback Method
hfus	37.41	kJ/mol	Joback Method
hvap	71.37	kJ/mol	Joback Method
log10ws	-5.17		Crippen Method
logp	3.969		Crippen Method
mcvol	229.130	ml/mol	McGowan Method
pc	1810.77	kPa	Joback Method
rinpol	2267.00		NIST Webbook
rinpol	2267.00		NIST Webbook
tb	784.99	K	Joback Method
tc	987.68	K	Joback Method
tf	487.09	K	Joback Method
vc	0.904	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	666.55	J/mol×K	784.99	Joback Method
cpg	678.62	J/mol×K	818.77	Joback Method
cpg	689.80	J/mol×K	852.55	Joback Method
cpg	700.12	J/mol×K	886.33	Joback Method
cpg	709.65	J/mol×K	920.12	Joback Method
cpg	718.45	J/mol×K	953.90	Joback Method
cpg	726.55	J/mol×K	987.68	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=U389832&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