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

Inchi: InChI=1S/C10H10F8O4/c11-7(12)9(15,16)3-21-5(19)1-2-6(20)22-4-10(17,18)8(13)14/h7-

InchiKey: JGCKGFNFNGRBQF-UHFFFAOYSA-N

Formula: C10H10F8O4

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

Mol. weight [g/mol]: 346.17

Physical Properties

Property code	Value	Unit	Source
gf	-1992.20	kJ/mol	Joback Method
hf	-2336.27	kJ/mol	Joback Method
hfus	30.00	kJ/mol	Joback Method
hvap	46.26	kJ/mol	Joback Method
log10ws	-2.99		Crippen Method
logp	2.654		Crippen Method
mcvol	180.800	ml/mol	McGowan Method
pc	1747.74	kPa	Joback Method
rinpol	1255.00		NIST Webbook
rinpol	1255.00		NIST Webbook
tb	567.60	K	Joback Method
tc	718.06	K	Joback Method
tf	326.34	K	Joback Method
vc	0.753	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	488.49	J/mol×K	567.60	Joback Method
cpg	499.46	J/mol×K	592.68	Joback Method
cpg	509.88	J/mol×K	617.75	Joback Method
cpg	519.75	J/mol×K	642.83	Joback Method
cpg	529.10	J/mol×K	667.91	Joback Method
cpg	537.94	J/mol×K	692.98	Joback Method
cpg	546.28	J/mol×K	718.06	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390848&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