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

Inchi: InChI=1S/C14H20F4O4/c15-13(16)14(17,18)9-22-12(20)7-6-11(19)21-8-10-4-2-1-3-5-10/
InchiKey: RPPXGNIYOTWHAZ-UHFFFAOYSA-N
Formula: C14H20F4O4
SMILES: O=C(CCC(=O)OCC(F)(F)C(F)F)OCC1CCCCC1
Mol. weight [g/mol]: 328.30

Physical Properties

Property code	Value	Unit	Source
gf	-1155.23	kJ/mol	Joback Method
hf	-1566.04	kJ/mol	Joback Method
hfus	30.81	kJ/mol	Joback Method
hvap	60.55	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	3.334		Crippen Method
mcvol	219.220	ml/mol	McGowan Method
pc	1710.36	kPa	Joback Method
rinpol	1735.00		NIST Webbook
rinpol	1735.00		NIST Webbook
tb	685.26	K	Joback Method
tc	868.83	K	Joback Method
tf	389.02	K	Joback Method
vc	0.856	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	650.28	J/mol×K	685.26	Joback Method
cpg	666.33	J/mol×K	715.85	Joback Method
cpg	681.41	J/mol×K	746.45	Joback Method
cpg	695.54	J/mol×K	777.04	Joback Method
cpg	708.75	J/mol×K	807.64	Joback Method
cpg	721.05	J/mol×K	838.23	Joback Method
cpg	732.48	J/mol×K	868.83	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390853&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