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

Inchi: InChI=1S/C14H19F5O4/c15-13(16,14(17,18)19)9-23-12(21)7-6-11(20)22-8-10-4-2-1-3-5-

InchiKey: OMUAOVOADXYXKV-UHFFFAOYSA-N

Formula: C14H19F5O4

SMILES: O=C(CCC(=O)OCC(F)(F)C(F)(F)F)OCC1CCCCC1

Mol. weight [g/mol]: 346.29

Physical Properties

Property code	Value	Unit	Source
gf	-1344.76	kJ/mol	Joback Method
hf	-1765.62	kJ/mol	Joback Method
hfus	30.00	kJ/mol	Joback Method
hvap	58.82	kJ/mol	Joback Method
log10ws	-4.04		Crippen Method
logp	3.631		Crippen Method
mcvol	220.990	ml/mol	McGowan Method
pc	1663.26	kPa	Joback Method
rinpol	1586.00		NIST Webbook
rinpol	1586.00		NIST Webbook
tb	681.74	K	Joback Method
tc	863.85	K	Joback Method
tf	407.03	K	Joback Method
vc	0.869	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	660.19	J/mol×K	681.74	Joback Method
cpg	675.85	J/mol×K	712.09	Joback Method
cpg	690.52	J/mol×K	742.44	Joback Method
cpg	704.23	J/mol×K	772.80	Joback Method
cpg	717.02	J/mol×K	803.15	Joback Method
cpg	728.92	J/mol×K	833.50	Joback Method
cpg	739.97	J/mol×K	863.85	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390869&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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