9-Decen-1-ol, pentafluoropropionate

Inchi: InChI=1S/C13H19F5O2/c1-2-3-4-5-6-7-8-9-10-20-11(19)12(14,15)13(16,17)18/h2H,1,3-1
InchiKey: OCXPZJAQWPSRBU-UHFFFAOYSA-N
Formula: C13H19F5O2
SMILES: C=CCCCCCCCCOC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 302.28

Physical Properties

Property code	Value	Unit	Source
gf	-1055.87	kJ/mol	Joback Method
hf	-1429.07	kJ/mol	Joback Method
hfus	31.50	kJ/mol	Joback Method
hvap	46.34	kJ/mol	Joback Method
log10ws	-4.96		Crippen Method
logp	4.644		Crippen Method
mcvol	206.020	ml/mol	McGowan Method
pc	1519.94	kPa	Joback Method
rinpol	1265.80		NIST Webbook
rinpol	1265.80		NIST Webbook
tb	559.70	K	Joback Method
tc	714.66	K	Joback Method
tf	314.46	K	Joback Method
vc	0.837	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	540.60	J/mol×K	559.70	Joback Method
cpg	554.93	J/mol×K	585.53	Joback Method
cpg	568.55	J/mol×K	611.35	Joback Method
cpg	581.50	J/mol×K	637.18	Joback Method
cpg	593.80	J/mol×K	663.01	Joback Method
cpg	605.47	J/mol×K	688.83	Joback Method
cpg	616.54	J/mol×K	714.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U352656&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