trans-2-Decen-1-ol, heptafluorobutyrate

Inchi: InChI=1S/C14H19F7O2/c1-2-3-4-5-6-7-8-9-10-23-11(22)12(15,16)13(17,18)14(19,20)21/
InchiKey: KGYZTDBVTHWGKI-CMDGGOBGSA-N
Formula: C14H19F7O2
SMILES: CCCCCCCC=CCOC(=O)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 352.29

Physical Properties

Property code	Value	Unit	Source
gf	-1441.85	kJ/mol	Joback Method
hf	-1858.89	kJ/mol	Joback Method
hfus	34.32	kJ/mol	Joback Method
hvap	46.27	kJ/mol	Joback Method
log10ws	-5.69		Crippen Method
logp	5.279		Crippen Method
mcvol	223.650	ml/mol	McGowan Method
pc	1349.66	kPa	Joback Method
rinpol	1298.30		NIST Webbook
rinpol	1298.30		NIST Webbook
tb	585.37	K	Joback Method
tc	739.16	K	Joback Method
tf	326.01	K	Joback Method
vc	0.916	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	612.40	J/mol×K	585.37	Joback Method
cpg	626.85	J/mol×K	611.00	Joback Method
cpg	640.51	J/mol×K	636.63	Joback Method
cpg	653.43	J/mol×K	662.27	Joback Method
cpg	665.63	J/mol×K	687.90	Joback Method
cpg	677.16	J/mol×K	713.53	Joback Method
cpg	688.07	J/mol×K	739.16	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U352671&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