Vinyl perfluoro butyrate

Other names: vinyl heptafluorobutyrate
Inchi: InChI=1S/C6H3F7O2/c1-2-15-3(14)4(7,8)5(9,10)6(11,12)13/h2H,1H2
InchiKey: CJABYGHRZGXUKQ-UHFFFAOYSA-N
Formula: C6H3F7O2
SMILES: C=COC(=O)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 240.08
CAS: 356-28-5

Physical Properties

Property code	Value	Unit	Source
gf	-1501.59	kJ/mol	Joback Method
hf	-1685.56	kJ/mol	Joback Method
hfus	12.12	kJ/mol	Joback Method
hvap	27.83	kJ/mol	Joback Method
log10ws	-2.84		Crippen Method
logp	2.506		Crippen Method
mcvol	110.930	ml/mol	McGowan Method
pc	2592.49	kPa	Joback Method
tb	394.85	K	Joback Method
tc	545.86	K	Joback Method
tf	239.17	K	Joback Method
vc	0.469	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	248.57	J/mol×K	394.85	Joback Method
cpg	258.22	J/mol×K	420.02	Joback Method
cpg	267.25	J/mol×K	445.19	Joback Method
cpg	275.69	J/mol×K	470.36	Joback Method
cpg	283.56	J/mol×K	495.52	Joback Method
cpg	290.89	J/mol×K	520.69	Joback Method
cpg	297.71	J/mol×K	545.86	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C356285&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume