Iodononafluoro-t-butane

Inchi: InChI=1S/C4F9I/c5-2(6,7)1(14,3(8,9)10)4(11,12)13
InchiKey: WIKBZUXHNPONPP-UHFFFAOYSA-N
Formula: C4F9I
SMILES: FC(F)(F)C(I)(C(F)(F)F)C(F)(F)F
Mol. weight [g/mol]: 345.93
CAS: 4459-18-1

Physical Properties

Property code	Value	Unit	Source
gf	-1701.01	kJ/mol	Joback Method
hf	-1849.01	kJ/mol	Joback Method
hfus	8.59	kJ/mol	Joback Method
hvap	21.33	kJ/mol	Joback Method
log10ws	-4.54		Crippen Method
logp	3.847		Crippen Method
mcvol	108.970	ml/mol	McGowan Method
pc	2621.78	kPa	Joback Method
tb	364.57	K	Joback Method
tc	524.56	K	Joback Method
tf	207.89	K	Joback Method
vc	0.466	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	216.72	J/mol×K	364.57	Joback Method
cpg	226.61	J/mol×K	391.23	Joback Method
cpg	235.61	J/mol×K	417.90	Joback Method
cpg	243.77	J/mol×K	444.56	Joback Method
cpg	251.14	J/mol×K	471.23	Joback Method
cpg	257.76	J/mol×K	497.89	Joback Method
cpg	263.69	J/mol×K	524.56	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4459181&Units=SI

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