1-Chloro-2-iodotetrafluoroethane

Inchi: InChI=1S/C2ClF4I/c3-1(4,5)2(6,7)8
InchiKey: XNIBSTIKPHNKSO-UHFFFAOYSA-N
Formula: C2ClF4I
SMILES: FC(F)(Cl)C(F)(F)I
Mol. weight [g/mol]: 262.37
CAS: 421-78-3

Physical Properties

Property code	Value	Unit	Source
gf	-761.41	kJ/mol	Joback Method
hf	-825.42	kJ/mol	Joback Method
hfus	7.03	kJ/mol	Joback Method
hvap	27.94	kJ/mol	Joback Method
log10ws	-3.38		Crippen Method
logp	2.846		Crippen Method
mcvol	84.180	ml/mol	McGowan Method
pc	3853.09	kPa	Joback Method
tb	329.00	K	NIST Webbook
tc	562.90	K	Joback Method
tf	207.48	K	Joback Method
vc	0.335	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	129.52	J/mol×K	366.35	Joback Method
cpg	135.49	J/mol×K	399.11	Joback Method
cpg	140.77	J/mol×K	431.87	Joback Method
cpg	145.40	J/mol×K	464.62	Joback Method
cpg	149.43	J/mol×K	497.38	Joback Method
cpg	152.92	J/mol×K	530.14	Joback Method
cpg	155.90	J/mol×K	562.90	Joback Method

Sources

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=C421783&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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