(E)-1-Chloro-2-fluoroethene

Inchi: InChI=1S/C2HClF2/c3-2(5)1-4/h1H/b2-1-
InchiKey: CJENPNUXCMYXPT-UPHRSURJSA-N
Formula: C2HClF2
SMILES: FC=C(F)Cl
Mol. weight [g/mol]: 98.48
CAS: 30860-28-7

Physical Properties

Property code	Value	Unit	Source
gf	-363.92	kJ/mol	Joback Method
hf	-385.14	kJ/mol	Joback Method
hfus	10.19	kJ/mol	Joback Method
hvap	22.84	kJ/mol	Joback Method
ie	9.83 ± 0.02	eV	NIST Webbook
log10ws	-1.86		Crippen Method
logp	1.963		Crippen Method
mcvol	50.520	ml/mol	McGowan Method
pc	4565.38	kPa	Joback Method
tb	285.17	K	Joback Method
tc	448.37	K	Joback Method
tf	124.36	K	Joback Method
vc	0.213	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	65.54	J/mol×K	285.17	Joback Method
cpg	69.13	J/mol×K	312.37	Joback Method
cpg	72.51	J/mol×K	339.57	Joback Method
cpg	75.67	J/mol×K	366.77	Joback Method
cpg	78.64	J/mol×K	393.97	Joback Method
cpg	81.42	J/mol×K	421.17	Joback Method
cpg	84.02	J/mol×K	448.37	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=C30860287&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
ie:	Ionization energy
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