1-Propene, 1,1-dichloro-2-fluoro-

Other names: Propene, 1,1-dichloro-2-fluoro-
1,1-Dichloro-2-fluoro propene-1
Inchi: InChI=1S/C3H3Cl2F/c1-2(6)3(4)5/h1H3
InchiKey: BJSMMNZAHNXJCF-UHFFFAOYSA-N
Formula: C3H3Cl2F
SMILES: CC(F)=C(Cl)Cl
Mol. weight [g/mol]: 128.96
CAS: 430-95-5

Physical Properties

Property code	Value	Unit	Source
gf	-181.17	kJ/mol	Joback Method
hf	-235.20	kJ/mol	Joback Method
hfus	12.58	kJ/mol	Joback Method
hvap	30.34	kJ/mol	Joback Method
log10ws	-2.58		Crippen Method
logp	2.623		Crippen Method
mcvol	75.080	ml/mol	McGowan Method
pc	4093.38	kPa	Joback Method
tb	346.09	K	Joback Method
tc	535.48	K	Joback Method
tf	151.00	K	Joback Method
vc	0.301	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	104.04	J/mol×K	346.09	Joback Method
cpg	109.30	J/mol×K	377.65	Joback Method
cpg	114.22	J/mol×K	409.22	Joback Method
cpg	118.81	J/mol×K	440.78	Joback Method
cpg	123.10	J/mol×K	472.35	Joback Method
cpg	127.10	J/mol×K	503.91	Joback Method
cpg	130.83	J/mol×K	535.48	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C430955&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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