Propane, 1,1-dichloro-1-fluoro-

Other names: 1,1-Dichloro-1-fluoropropane
Inchi: InChI=1S/C3H5Cl2F/c1-2-3(4,5)6/h2H2,1H3
InchiKey: JXGAPNVPOVVXPV-UHFFFAOYSA-N
Formula: C3H5Cl2F
SMILES: CCC(F)(Cl)Cl
Mol. weight [g/mol]: 130.98
CAS: 7799-56-6

Physical Properties

Property code	Value	Unit	Source
gf	-241.45	kJ/mol	Joback Method
hf	-341.59	kJ/mol	Joback Method
hfus	7.59	kJ/mol	Joback Method
hvap	28.93	kJ/mol	Joback Method
log10ws	-2.34		Crippen Method
logp	2.497		Crippen Method
mcvol	79.380	ml/mol	McGowan Method
pc	3877.12	kPa	Joback Method
tb	338.94	K	Joback Method
tc	522.95	K	Joback Method
tf	186.42	K	Joback Method
vc	0.308	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	119.05	J/mol×K	338.94	Joback Method
cpg	125.93	J/mol×K	369.61	Joback Method
cpg	132.36	J/mol×K	400.28	Joback Method
cpg	138.37	J/mol×K	430.94	Joback Method
cpg	143.98	J/mol×K	461.61	Joback Method
cpg	149.21	J/mol×K	492.28	Joback Method
cpg	154.08	J/mol×K	522.95	Joback Method

Sources

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=C7799566&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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