1-Propene, 1-fluoro

Inchi: InChI=1S/C3H5F/c1-2-3-4/h2-3H,1H3
InchiKey: VJGCZWVJDRIHNC-UHFFFAOYSA-N
Formula: C3H5F
SMILES: CC=CF
Mol. weight [g/mol]: 60.07
CAS: 406-33-7

Physical Properties

Property code	Value	Unit	Source
gf	-140.21	kJ/mol	Joback Method
hf	-184.14	kJ/mol	Joback Method
hfus	6.81	kJ/mol	Joback Method
hvap	21.41	kJ/mol	Joback Method
log10ws	-1.28		Crippen Method
logp	1.490		Crippen Method
mcvol	50.600	ml/mol	McGowan Method
pc	4450.38	kPa	Joback Method
tb	271.47	K	Joback Method
tc	430.49	K	Joback Method
tf	119.08	K	Joback Method
vc	0.202	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	63.00	J/mol×K	271.47	Joback Method
cpg	68.38	J/mol×K	297.97	Joback Method
cpg	73.52	J/mol×K	324.48	Joback Method
cpg	78.44	J/mol×K	350.98	Joback Method
cpg	83.13	J/mol×K	377.48	Joback Method
cpg	87.60	J/mol×K	403.98	Joback Method
cpg	91.87	J/mol×K	430.49	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=C406337&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