1-Butene, 1,1-difluoro

Inchi: InChI=1S/C4H6F2/c1-2-3-4(5)6/h3H,2H2,1H3
InchiKey: CYICOSUAVXTZOD-UHFFFAOYSA-N
Formula: C4H6F2
SMILES: CCC=C(F)F
Mol. weight [g/mol]: 92.09

Physical Properties

Property code	Value	Unit	Source
gf	-335.15	kJ/mol	Joback Method
hf	-410.68	kJ/mol	Joback Method
hfus	11.17	kJ/mol	Joback Method
hvap	22.90	kJ/mol	Joback Method
log10ws	-2.05		Crippen Method
logp	2.177		Crippen Method
mcvol	66.460	ml/mol	McGowan Method
pc	3740.80	kPa	Joback Method
rinpol	414.00		NIST Webbook
tb	293.50	K	Joback Method
tc	448.34	K	Joback Method
tf	116.98	K	Joback Method
vc	0.277	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	98.49	J/mol×K	293.50	Joback Method
cpg	105.28	J/mol×K	319.31	Joback Method
cpg	111.77	J/mol×K	345.11	Joback Method
cpg	117.98	J/mol×K	370.92	Joback Method
cpg	123.92	J/mol×K	396.73	Joback Method
cpg	129.59	J/mol×K	422.53	Joback Method
cpg	135.01	J/mol×K	448.34	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=R510895&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume