Propene, 1,1-difluoro-

Inchi: InChI=1S/C3H4F2/c1-2-3(4)5/h2H,1H3
InchiKey: YHLIEGBCOUQKHU-UHFFFAOYSA-N
Formula: C3H4F2
SMILES: CC=C(F)F
Mol. weight [g/mol]: 78.06
CAS: 430-63-7

Physical Properties

Property code	Value	Unit	Source
gf	-343.57	kJ/mol	Joback Method
hf	-390.04	kJ/mol	Joback Method
hfus	8.58	kJ/mol	Joback Method
hvap	20.68	kJ/mol	Joback Method
log10ws	-1.63		Crippen Method
logp	1.787		Crippen Method
mcvol	52.370	ml/mol	McGowan Method
pc	4222.04	kPa	Joback Method
rinpol	317.00		NIST Webbook
tb	270.62	K	Joback Method
tc	423.47	K	Joback Method
tf	105.71	K	Joback Method
vc	0.221	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	71.17	J/mol×K	270.62	Joback Method
cpg	76.43	J/mol×K	296.09	Joback Method
cpg	81.45	J/mol×K	321.57	Joback Method
cpg	86.24	J/mol×K	347.04	Joback Method
cpg	90.81	J/mol×K	372.52	Joback Method
cpg	95.17	J/mol×K	397.99	Joback Method
cpg	99.32	J/mol×K	423.47	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=C430637&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

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