

Propene, 3,3-difluoro

Inchi:	InChI=1S/C3H4F2/c1-2-3(4)5/h2-3H,1H2
InchiKey:	BUMFHKJRHRUGNU-UHFFFAOYSA-N
Formula:	C3H4F2
SMILES:	C=CC(F)F
Mol. weight [g/mol]:	78.06

Physical Properties

Property code	Value	Unit	Source
gf	-329.84	kJ/mol	Joback Method
hf	-377.32	kJ/mol	Joback Method
hfus	4.88	kJ/mol	Joback Method
hvap	19.58	kJ/mol	Joback Method
log10ws	-1.25		Crippen Method
logp	1.438		Crippen Method
mcvol	52.370	ml/mol	McGowan Method
pc	4183.90	kPa	Joback Method
rinpola	367.00		NIST Webbook
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tb	262.82	K	Joback Method
tc	410.23	K	Joback Method
tf	107.99	K	Joback Method
vc	0.214	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	73.33	J/mol×K	262.82	Joback Method
cpg	78.27	J/mol×K	287.39	Joback Method
cpg	83.03	J/mol×K	311.96	Joback Method
cpg	87.60	J/mol×K	336.53	Joback Method
cpg	92.01	J/mol×K	361.10	Joback Method
cpg	96.24	J/mol×K	385.67	Joback Method
cpg	100.30	J/mol×K	410.23	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=R512064&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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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