1-Propene, 1,1,3,3,3-pentafluoro-

Other names:	Propene, 1,1,3,3,3-pentafluoro-
	2-Hydropentafluoropropylene
	1,1,3,3,3-Pentafluoropropene-1
	1,1,3,3,3-Pentafluoro-1-propene
	2H-perfluoropropene
	FC-1223zc
	1,1,3,3,3-pentafluoropropene
Inchi:	InChI=1S/C3HF5/c4-2(5)1-3(6,7)8/h1H
InchiKey:	QAERDLQYXMEHEB-UHFFFAOYSA-N
Formula:	C3HF5
SMILES:	FC(F)=CC(F)(F)F
Mol. weight [g/mol]:	132.03
CAS:	690-27-7

Physical Properties

Property code	Value	Unit	Source
gf	-925.16	kJ/mol	Joback Method
hf	-987.12	kJ/mol	Joback Method
hfus	10.40	kJ/mol	Joback Method
hvap	16.93	kJ/mol	Joback Method
log10ws	-2.29		Crippen Method
logp	2.329		Crippen Method
mcvol	57.680	ml/mol	McGowan Method
pc	3650.93	kPa	Joback Method
tb	252.00	K	NIST Webbook
tc	401.68	K	Joback Method
tf	109.90	K	Joback Method
vc	0.264	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	92.67	J/mol×K	265.20	Joback Method
cpg	98.78	J/mol×K	287.95	Joback Method

cpg	104.54	J/mol×K	310.69	Joback Method
cpg	109.97	J/mol×K	333.44	Joback Method
cpg	115.08	J/mol×K	356.19	Joback Method
cpg	119.90	J/mol×K	378.93	Joback Method
cpg	124.42	J/mol×K	401.68	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C690277&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

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