Perfluoro-2-methyl-2-pentene

Other names:	Perfluoro-(2-methylpent-2-ene) 2-Pentene, 1,1,1,3,4,4,5,5,5-nonafluoro-2-(trifluoromethyl)- 2-Methylpent-2-ene, perfluoro- 1,1,1,3,4,4,5,5,5-nonafluoro-2-(trifluoromethyl)pent-4-ene
Inchi:	InChI=1S/C6F12/c7-2(3(8,9)6(16,17)18)1(4(10,11)12)5(13,14)15
InchiKey:	FAEGGADNHFKDQX-UHFFFAOYSA-N
Formula:	C6F12
SMILES:	FC(=C(C(F)(F)F)C(F)(F)F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	300.05
CAS:	1584-03-8

Physical Properties

Property code	Value	Unit	Source
chl	-1993.70 ± 4.00	kJ/mol	NIST Webbook
gf	-2263.60	kJ/mol	Joback Method
hf	-2499.00 ± 4.10	kJ/mol	NIST Webbook
hfl	-2522.40 ± 4.10	kJ/mol	NIST Webbook
hfus	16.18	kJ/mol	Joback Method
hvap	23.40 ± 0.40	kJ/mol	NIST Webbook
log10ws	-4.84		Crippen Method
logp	4.532		Crippen Method
mcvol	112.340	ml/mol	McGowan Method
pc	2073.65	kPa	Joback Method
tb	318.92	K	Joback Method
tc	438.47	K	Joback Method
tf	141.14	K	Joback Method
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.46	J/mol×K	318.92	Joback Method
cpg	250.44	J/mol×K	338.85	Joback Method
cpg	260.78	J/mol×K	358.77	Joback Method

cpg	270.51	J/mol×K	378.70	Joback Method
cpg	279.64	J/mol×K	398.62	Joback Method
cpg	288.21	J/mol×K	418.55	Joback Method
cpg	296.23	J/mol×K	438.47	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1584038&Units=SI

Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase 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

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