

# 1-Octene, 1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hexadecafluoro-

Other names:	perfluorooct-1-ene
Inchi:	InChI=1S/C8F16/c9-1(2(10)11)3(12,13)4(14,15)5(16,17)6(18,19)7(20,21)8(22,23)24
InchiKey:	YCBPKOZNGFQMPB-UHFFFAOYSA-N
Formula:	C8F16
SMILES:	FC(F)=C(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	400.06
CAS:	559-14-8

## Physical Properties

Property code	Value	Unit	Source
gf	-3020.32	kJ/mol	Joback Method
hf	-3301.07	kJ/mol	Joback Method
hfus	18.85	kJ/mol	Joback Method
hvap	12.67	kJ/mol	Joback Method
log10ws	-6.30		Crippen Method
logp	5.803		Crippen Method
mcvol	147.600	ml/mol	McGowan Method
pc	1562.28	kPa	Joback Method
rinpol	365.00		NIST Webbook
tb	355.30	K	Joback Method
tc	468.37	K	Joback Method
tf	170.88	K	Joback Method
vc	0.688	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.42	J/mol×K	355.30	Joback Method
cpg	362.26	J/mol×K	374.15	Joback Method
cpg	374.35	J/mol×K	392.99	Joback Method
cpg	385.71	J/mol×K	411.84	Joback Method
cpg	396.37	J/mol×K	430.68	Joback Method
cpg	406.36	J/mol×K	449.53	Joback Method
cpg	415.71	J/mol×K	468.37	Joback Method

# Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C559148&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C559148&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvac:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rlnol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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