undecafluorocyclohexane

Other names: 1-Hperfluorocyclohexane
Inchi: InChI=1S/C6HF11/c7-1-2(8,9)4(12,13)6(16,17)5(14,15)3(1,10)11/h1H
InchiKey: AWQSRASHARXGAH-UHFFFAOYSA-N
Formula: C6HF11
SMILES: FC1C(F)(F)C(F)(F)C(F)(F)C(F)(F)C1(F)F
Mol. weight [g/mol]: 282.05
CAS: 308-24-7

Physical Properties

Property code	Value	Unit	Source
gf	-2184.82	kJ/mol	Joback Method
hf	-2295.56	kJ/mol	Joback Method
hfus	10.88	kJ/mol	Joback Method
hvap	13.09	kJ/mol	Joback Method
log10ws	-3.76		Crippen Method
logp	3.515		Crippen Method
mcvol	104.010	ml/mol	McGowan Method
pc	2441.06	kPa	Joback Method
rinpol	317.00		NIST Webbook
tb	326.05	K	Joback Method
tc	459.39	K	Joback Method
tf	269.55	K	Joback Method
vc	0.487	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	218.16	J/mol×K	326.05	Joback Method
cpg	233.02	J/mol×K	348.27	Joback Method
cpg	246.49	J/mol×K	370.50	Joback Method
cpg	258.67	J/mol×K	392.72	Joback Method
cpg	269.66	J/mol×K	414.94	Joback Method
cpg	279.56	J/mol×K	437.17	Joback Method
cpg	288.46	J/mol×K	459.39	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=C308247&Units=SI

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