perfluoro-2,2,4-trimethylpentane

Inchi: InChI=1S/C8F18/c9-2(7(21,22)23,8(24,25)26)3(10,11)1(4(12,13)14,5(15,16)17)6(18,19)2
InchiKey: GTTNGNCJHFPTQV-UHFFFAOYSA-N
Formula: C8F18
SMILES: FC(F)(F)C(F)(C(F)(F)F)C(F)(F)C(C(F)(F)F)(C(F)(F)F)C(F)(F)F
Mol. weight [g/mol]: 438.06

Physical Properties

Property code	Value	Unit	Source
gf	-3467.38	kJ/mol	Joback Method
hf	-3808.43	kJ/mol	Joback Method
hfus	12.60	kJ/mol	Joback Method
hvap	8.33	kJ/mol	Joback Method
log10ws	-6.52		Crippen Method
logp	6.128		Crippen Method
mcvol	155.440	ml/mol	McGowan Method
pc	1430.46	kPa	Joback Method
rinpol	221.00		NIST Webbook
tb	343.46	K	Joback Method
tc	449.37	K	Joback Method
tf	209.90	K	Joback Method
vc	0.720	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.72	J/mol×K	343.46	Joback Method
cpg	389.83	J/mol×K	361.11	Joback Method
cpg	403.16	J/mol×K	378.76	Joback Method
cpg	415.73	J/mol×K	396.41	Joback Method
cpg	427.56	J/mol×K	414.06	Joback Method
cpg	438.69	J/mol×K	431.72	Joback Method
cpg	449.13	J/mol×K	449.37	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=R206818&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