Propane, 1,2,2,3,3-pentachloro-1,1-difluoro-

Other names: 1,1-Difluoro-1,2,2,3,3-pentachloro propane
Inchi: InChI=1S/C3HCl5F2/c4-1(5)2(6,7)3(8,9)10/h1H
InchiKey: DLWHXAYXTKNIBW-UHFFFAOYSA-N
Formula: C3HCl5F2
SMILES: FC(F)(Cl)C(Cl)(Cl)C(Cl)Cl
Mol. weight [g/mol]: 252.30
CAS: 422-30-0

Physical Properties

Property code	Value	Unit	Source
gf	-471.65	kJ/mol	Joback Method
hf	-598.95	kJ/mol	Joback Method
hfus	12.32	kJ/mol	Joback Method
hvap	39.58	kJ/mol	Joback Method
log10ws	-3.87		Crippen Method
logp	3.796		Crippen Method
mcvol	117.870	ml/mol	McGowan Method
pc	3322.01	kPa	Joback Method
tb	446.83	K	Joback Method
tc	663.03	K	Joback Method
tf	264.19	K	Joback Method
vc	0.457	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	192.01	J/mol×K	446.83	Joback Method
cpg	198.20	J/mol×K	482.86	Joback Method
cpg	203.62	J/mol×K	518.90	Joback Method
cpg	208.34	J/mol×K	554.93	Joback Method
cpg	212.41	J/mol×K	590.96	Joback Method
cpg	215.90	J/mol×K	627.00	Joback Method
cpg	218.87	J/mol×K	663.03	Joback Method

Sources

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=C422300&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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