Butane, 2,2,3,3-tetrachloro-1,1,1,4,4,4-hexafluoro-

Other names: Butane, 2,2,3,3-tetrachlorohexafluoro-
Hexafluoro-2,2,3,3-tetrachlorobutane
1,1,1,4,4,4-Hexafluoro tetrachloro butane
2,2,3,3-Tetrachlorohexafluorobutane

Inchi: InChI=1S/C4Cl4F6/c5-1(6,3(9,10)11)2(7,8)4(12,13)14

InchiKey: BZBLUUDREZEDDJ-UHFFFAOYSA-N

Formula: C4Cl4F6

SMILES: FC(F)(F)C(Cl)(Cl)C(Cl)(Cl)C(F)(F)F

Mol. weight [g/mol]: 303.85

CAS: 375-34-8

Physical Properties

Property code	Value	Unit	Source
gf	-1222.42	kJ/mol	Joback Method
hf	-1400.51	kJ/mol	Joback Method
hfus	11.73	kJ/mol	Joback Method
hvap	31.95	kJ/mol	Joback Method
log10ws	-4.65		Crippen Method
logp	4.459		Crippen Method
mcvol	126.800	ml/mol	McGowan Method
pc	2646.11	kPa	Joback Method
tb	405.00 ± 1.00	K	NIST Webbook
tc	607.96	K	Joback Method
tf	267.74	K	Joback Method
vc	0.519	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	246.17	J/mol×K	423.34	Joback Method
cpg	254.83	J/mol×K	454.11	Joback Method
cpg	262.50	J/mol×K	484.88	Joback Method
cpg	269.24	J/mol×K	515.65	Joback Method
cpg	275.12	J/mol×K	546.42	Joback Method

cpg	280.22	J/mol×K	577.19	Joback Method
cpg	284.60	J/mol×K	607.96	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C375348&Units=SI
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

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