# Benzene, 1,3-dichloro-2,4,5,6-tetrafluoro-

**Other names:** Benzene, 1,3-dichlorotetrafluoro-
1,3-Dichloro-2,4,5,6-tetrafluorobenzene
1,3-Dichlorotetrafluorobenzene
2,4,5,6-Tetrafluoro-1,3-dichlorobenzene
**Inchi:** InChI=1S/C6Cl2F4/c7-1-3(9)2(8)5(11)6(12)4(1)10
**InchiKey:** LFIJIYWQWRQWQC-UHFFFAOYSA-N
**Formula:** C6Cl2F4
**SMILES:** Fc1c(F)c(Cl)c(F)c(Cl)c1F
**Mol. weight [g/mol]:** 218.96
**CAS:** 1198-61-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -739.20 | kJ/mol | Joback Method |
| hf | -803.91 | kJ/mol | Joback Method |
| hfus | 24.11 | kJ/mol | Joback Method |
| hvap | 40.04 | kJ/mol | Joback Method |
| log10ws | -4.17 | | Crippen Method |
| logp | 3.550 | | Crippen Method |
| mcvol | 103.200 | ml/mol | McGowan Method |
| pc | 3114.04 | kPa | Joback Method |
| tb | 424.20 | K | NIST Webbook |
| tc | 650.88 | K | Joback Method |
| tf | 308.60 | K | Joback Method |
| vc | 0.433 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 181.91 | J/mol×K | 460.20 | Joback Method |
| cpg | 186.98 | J/mol×K | 491.98 | Joback Method |
| cpg | 191.83 | J/mol×K | 523.76 | Joback Method |
| cpg | 196.48 | J/mol×K | 555.54 | Joback Method |
| cpg | 200.92 | J/mol×K | 587.32 | Joback Method |

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|---|---|---|---|---|
| cpg | 205.16 | J/mol×K | 619.10 | Joback Method |
| cpg | 209.19 | J/mol×K | 650.88 | 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=C1198614&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **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 |