# 9-Decen-1-ol, heptafluorobutyrate

**Inchi:** InChI=1S/C14H19F7O2/c1-2-3-4-5-6-7-8-9-10-23-11(22)12(15,16)13(17,18)14(19,20)21/
**InchiKey:** XFATYVOKIPHXLM-UHFFFAOYSA-N
**Formula:** C14H19F7O2
**SMILES:** C=CCCCCCCCCOC(=O)C(F)(F)C(F)(F)C(F)(F)F
**Mol. weight [g/mol]:** 352.29

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1434.23 | kJ/mol | Joback Method |
| hf | -1850.68 | kJ/mol | Joback Method |
| hfus | 32.84 | kJ/mol | Joback Method |
| hvap | 45.64 | kJ/mol | Joback Method |
| log10ws | -5.69 | | Crippen Method |
| logp | 5.279 | | Crippen Method |
| mcvol | 223.650 | ml/mol | McGowan Method |
| pc | 1339.80 | kPa | Joback Method |
| rinpol | 1298.10 | | NIST Webbook |
| rinpol | 1298.10 | | NIST Webbook |
| tb | 577.89 | K | Joback Method |
| tc | 728.80 | K | Joback Method |
| tf | 329.33 | K | Joback Method |
| vc | 0.917 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 610.64 | J/mol×K | 577.89 | Joback Method |
| cpg | 625.07 | J/mol×K | 603.04 | Joback Method |
| cpg | 638.74 | J/mol×K | 628.19 | Joback Method |
| cpg | 651.69 | J/mol×K | 653.34 | Joback Method |
| cpg | 663.93 | J/mol×K | 678.50 | Joback Method |
| cpg | 675.52 | J/mol×K | 703.65 | Joback Method |
| cpg | 686.49 | J/mol×K | 728.80 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U352654&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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# 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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |