# 1-Heptafluorobutyryloxy-2-methylpentane

**Inchi:** InChI=1S/C10H13F7O2/c1-3-4-6(2)5-19-7(18)8(11,12)9(13,14)10(15,16)17/h6H,3-5H2,1
**InchiKey:** OAVKNMKBMUDCCL-UHFFFAOYSA-N
**Formula:** C10H13F7O2
**SMILES:** CCCC(C)COC(=O)C(F)(F)C(F)(F)C(F)(F)F
**Mol. weight [g/mol]:** 298.20
**CAS:** 155089-98-8

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1558.19 | kJ/mol | Joback Method |
| hf | -1898.83 | kJ/mol | Joback Method |
| hfus | 20.24 | kJ/mol | Joback Method |
| hvap | 37.02 | kJ/mol | Joback Method |
| log10ws | -3.92 | | Crippen Method |
| logp | 3.799 | | Crippen Method |
| mcvol | 171.590 | ml/mol | McGowan Method |
| pc | 1762.45 | kPa | Joback Method |
| rinpol | 866.50 | | NIST Webbook |
| rinpol | 886.90 | | NIST Webbook |
| rinpol | 866.50 | | NIST Webbook |
| tb | 489.25 | K | Joback Method |
| tc | 639.92 | K | Joback Method |
| tf | 271.01 | K | Joback Method |
| vc | 0.707 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 434.04 | J/mol×K | 489.25 | Joback Method |
| cpg | 447.25 | J/mol×K | 514.36 | Joback Method |
| cpg | 459.76 | J/mol×K | 539.47 | Joback Method |
| cpg | 471.59 | J/mol×K | 564.59 | Joback Method |
| cpg | 482.76 | J/mol×K | 589.70 | Joback Method |
| cpg | 493.30 | J/mol×K | 614.81 | Joback Method |

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|---|---|---|---|---|
| cpg | 503.25 | J/mol×K | 639.92 | Joback Method |

# Sources

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|---|---|
| **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=C155089988&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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |