# 1-acetoxy-2-propionyloxyethane

**Inchi:** InChI=1S/C7H12O4/c1-3-7(9)11-5-4-10-6(2)8/h3-5H2,1-2H3
**InchiKey:** MRWOMAPJRAVONW-UHFFFAOYSA-N
**Formula:** C7H12O4
**SMILES:** CCC(=O)OCCOC(C)=O
**Mol. weight [g/mol]:** 160.17
**CAS:** 98962-89-1

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -459.78 | kJ/mol | Joback Method |
| hf | -677.41 | kJ/mol | Joback Method |
| hfus | 19.46 | kJ/mol | Joback Method |
| hvap | 49.49 | kJ/mol | Joback Method |
| log10ws | -0.48 | | Crippen Method |
| logp | 0.503 | | Crippen Method |
| mcvol | 124.370 | ml/mol | McGowan Method |
| pc | 3093.29 | kPa | Joback Method |
| ripol | 1486.00 | | NIST Webbook |
| tb | 512.14 | K | Joback Method |
| tc | 697.87 | K | Joback Method |
| tf | 312.97 | K | Joback Method |
| vc | 0.475 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 278.30 | J/mol×K | 512.14 | Joback Method |
| cpg | 288.74 | J/mol×K | 543.09 | Joback Method |
| cpg | 298.81 | J/mol×K | 574.05 | Joback Method |
| cpg | 308.51 | J/mol×K | 605.00 | Joback Method |
| cpg | 317.83 | J/mol×K | 635.96 | Joback Method |
| cpg | 326.76 | J/mol×K | 666.91 | Joback Method |
| cpg | 335.29 | J/mol×K | 697.87 | Joback Method |
| dvisc | 0.0020676 | Pa×s | 312.97 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0012258 | Pa×s | 346.17 | Joback Method |
| dvisc | 0.0007964 | Pa×s | 379.36 | Joback Method |
| dvisc | 0.0005546 | Pa×s | 412.56 | Joback Method |
| dvisc | 0.0004076 | Pa×s | 445.75 | Joback Method |
| dvisc | 0.0003126 | Pa×s | 478.94 | Joback Method |
| dvisc | 0.0002482 | Pa×s | 512.14 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C98962891&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

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |
| **ripol:** | Polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |