# Carbonic acid, allyl 4-chlorophenyl ester

**Inchi:** InChI=1S/C10H9ClO3/c1-2-7-13-10(12)14-9-5-3-8(11)4-6-9/h2-6H,1,7H2
**InchiKey:** VQLKYCRDMAFZRI-UHFFFAOYSA-N
**Formula:** C10H9ClO3
**SMILES:** C=CCOC(=O)Oc1ccc(Cl)cc1
**Mol. weight [g/mol]:** 212.63

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -126.91 | kJ/mol | Joback Method |
| hf | -292.00 | kJ/mol | Joback Method |
| hfus | 22.20 | kJ/mol | Joback Method |
| hvap | 56.07 | kJ/mol | Joback Method |
| log10ws | -3.23 | | Crippen Method |
| logp | 3.041 | | Crippen Method |
| mcvol | 149.250 | ml/mol | McGowan Method |
| pc | 2992.59 | kPa | Joback Method |
| rinpol | 1500.00 | | NIST Webbook |
| tb | 592.68 | K | Joback Method |
| tc | 812.73 | K | Joback Method |
| tf | 363.95 | K | Joback Method |
| vc | 0.559 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 328.95 | J/mol×K | 592.68 | Joback Method |
| cpg | 340.51 | J/mol×K | 629.35 | Joback Method |
| cpg | 351.39 | J/mol×K | 666.03 | Joback Method |
| cpg | 361.57 | J/mol×K | 702.70 | Joback Method |
| cpg | 371.08 | J/mol×K | 739.38 | Joback Method |
| cpg | 379.91 | J/mol×K | 776.05 | Joback Method |
| cpg | 388.07 | J/mol×K | 812.73 | Joback Method |
| dvisc | 0.0012159 | Pa×s | 363.95 | Joback Method |
| dvisc | 0.0007547 | Pa×s | 402.07 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0005088 | Pa×s | 440.19 | Joback Method |
| dvisc | 0.0003652 | Pa×s | 478.32 | Joback Method |
| dvisc | 0.0002753 | Pa×s | 516.44 | Joback Method |
| dvisc | 0.0002158 | Pa×s | 554.56 | Joback Method |
| dvisc | 0.0001745 | Pa×s | 592.68 | Joback Method |

# Sources

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|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U357809&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

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