# Carbamic acid, (4-chlorophenyl)-, ethyl ester

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|---|---|
| **Other names:** | Carbanilic acid, p-chloro-, ethyl ester |
| | p-Chlorophenylurethane |
| | Ethyl N-(p-chlorophenyl)carbamate |
| | N-(4-Chlorophenyl)ethylurethane |
| | Ethyl 4-chlorophenylcarbamate |
| | p-Chlorocarbanilic acid ethyl ester |
| | Carbamic acid, (p-chlorophenyl)-, ethyl ester |
| | 4-Chlorophenylamine, N-ethoxycarbonyl- |
| | Ethyl (p-chlorophenyl)carbamate |
| | Ethyl 4-chlorocarbanilate |
| | Ethyl N-(4-chlorophenyl)carbamate |
| | Ethyl p-chlorocarbanilate |
| | NSC 26960 |
| **Inchi:** | InChI=1S/C9H10ClNO2/c1-2-13-9(12)11-8-5-3-7(10)4-6-8/h3-6H,2H2,1H3,(H,11,12) |
| **InchiKey:** | WSKXXIMERYQVGJ-UHFFFAOYSA-N |
| **Formula:** | C9H10ClNO2 |
| **SMILES:** | CCOC(=O)Nc1ccc(Cl)cc1 |
| **Mol. weight [g/mol]:** | 199.63 |
| **CAS:** | 2621-80-9 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -28.78 | kJ/mol | Joback Method |
| hf | -211.10 | kJ/mol | Joback Method |
| hfus | 24.80 | kJ/mol | Joback Method |
| hvap | 58.54 | kJ/mol | Joback Method |
| log10ws | -2.84 | | Crippen Method |
| logp | 2.908 | | Crippen Method |
| mcvol | 143.570 | ml/mol | McGowan Method |
| pc | 3287.81 | kPa | Joback Method |
| rinpol | 1578.00 | | NIST Webbook |
| rinpol | 1585.00 | | NIST Webbook |
| rinpol | 1589.00 | | NIST Webbook |
| rinpol | 1581.00 | | NIST Webbook |
| tb | 600.87 | K | Joback Method |
| tc | 822.23 | K | Joback Method |
| tf | 384.87 | K | Joback Method |

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|---|---|---|---|
| vc | 0.539 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 325.59 | J/mol×K | 600.87 | Joback Method |
| cpg | 337.21 | J/mol×K | 637.76 | Joback Method |
| cpg | 348.09 | J/mol×K | 674.66 | Joback Method |
| cpg | 358.25 | J/mol×K | 711.55 | Joback Method |
| cpg | 367.72 | J/mol×K | 748.44 | Joback Method |
| cpg | 376.50 | J/mol×K | 785.34 | Joback Method |
| cpg | 384.60 | J/mol×K | 822.23 | Joback Method |

# Sources

**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=C2621809&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# Legend

**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