# Acetyl chloride, (2,4-dichlorophenoxy)-

**Other names:** (2,4-Dichlorophenoxy)acetyl chloride
**Inchi:** InChI=1S/C8H5Cl3O2/c9-5-1-2-7(6(10)3-5)13-4-8(11)12/h1-3H,4H2
**InchiKey:** FUJSJWRORKKPAI-UHFFFAOYSA-N
**Formula:** C8H5Cl3O2
**SMILES:** O=C(Cl)COc1ccc(Cl)cc1Cl
**Mol. weight [g/mol]:** 239.48
**CAS:** 774-74-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -160.08 | kJ/mol | Joback Method |
| hf | -286.88 | kJ/mol | Joback Method |
| hfus | 25.12 | kJ/mol | Joback Method |
| hvap | 59.31 | kJ/mol | Joback Method |
| log10ws | -3.31 | | Crippen Method |
| logp | 3.138 | | Crippen Method |
| mcvol | 143.980 | ml/mol | McGowan Method |
| pc | 3265.31 | kPa | Joback Method |
| tb | 607.66 | K | Joback Method |
| tc | 843.00 | K | Joback Method |
| tf | 393.30 | K | Joback Method |
| vc | 0.546 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 279.20 | J/mol×K | 607.66 | Joback Method |
| cpg | 287.86 | J/mol×K | 646.88 | Joback Method |
| cpg | 295.93 | J/mol×K | 686.11 | Joback Method |
| cpg | 303.40 | J/mol×K | 725.33 | Joback Method |
| cpg | 310.29 | J/mol×K | 764.55 | Joback Method |
| cpg | 316.60 | J/mol×K | 803.78 | Joback Method |
| cpg | 322.34 | J/mol×K | 843.00 | Joback Method |
| dvisc | 0.0012328 | Pa×s | 393.30 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0008286 | Pa×s | 429.03 | Joback Method |
| dvisc | 0.0005919 | Pa×s | 464.75 | Joback Method |
| dvisc | 0.0004437 | Pa×s | 500.48 | Joback Method |
| dvisc | 0.0003456 | Pa×s | 536.21 | Joback Method |
| dvisc | 0.0002777 | Pa×s | 571.93 | Joback Method |
| dvisc | 0.0002290 | Pa×s | 607.66 | 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=C774743&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 |
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |