# 3-Methyl-p-anisaldehyde

**Other names:** Benzaldehyde, 4-methoxy-3-methyl-
3-Methyl-para-anisaldehyde
3-methyl-4-anisaldehyde
**Inchi:** InChI=1S/C9H10O2/c1-7-5-8(6-10)3-4-9(7)11-2/h3-6H,1-2H3
**InchiKey:** MYLBIQHZWFWSMH-UHFFFAOYSA-N
**Formula:** C9H10O2
**SMILES:** COc1ccc(C=O)cc1C
**Mol. weight [g/mol]:** 150.17
**CAS:** 32723-67-4

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -86.47 | kJ/mol | Joback Method |
| hf | -233.30 | kJ/mol | Joback Method |
| hfus | 15.81 | kJ/mol | Joback Method |
| hvap | 48.36 | kJ/mol | Joback Method |
| log10ws | -2.31 | | Crippen Method |
| logp | 1.816 | | Crippen Method |
| mcvol | 121.350 | ml/mol | McGowan Method |
| pc | 3364.54 | kPa | Joback Method |
| tb | 513.04 | K | Joback Method |
| tc | 726.15 | K | Joback Method |
| tf | 306.88 | K | Joback Method |
| vc | 0.467 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 257.40 | J/mol×K | 513.04 | Joback Method |
| cpg | 268.93 | J/mol×K | 548.56 | Joback Method |
| cpg | 279.91 | J/mol×K | 584.08 | Joback Method |
| cpg | 290.33 | J/mol×K | 619.60 | Joback Method |
| cpg | 300.20 | J/mol×K | 655.12 | Joback Method |
| cpg | 309.53 | J/mol×K | 690.64 | Joback Method |

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|---|---|---|---|---|
| cpg | 318.32 | J/mol×K | 726.15 | Joback Method |
| dvisc | 0.0014682 | Pa×s | 306.88 | Joback Method |
| dvisc | 0.0009264 | Pa×s | 341.24 | Joback Method |
| dvisc | 0.0006359 | Pa×s | 375.60 | Joback Method |
| dvisc | 0.0004649 | Pa×s | 409.96 | Joback Method |
| dvisc | 0.0003568 | Pa×s | 444.32 | Joback Method |
| dvisc | 0.0002844 | Pa×s | 478.68 | Joback Method |
| dvisc | 0.0002337 | Pa×s | 513.04 | Joback Method |

# Pressure Dependent Properties

| Property code | Value | Unit | Pressure [kPa] | Source |
|---|---|---|---|---|
| tbrp | 355.70 | K | 0.10 | NIST Webbook |

# Sources

**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
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C32723674&Units=SI

# 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
**tb:** Normal Boiling Point Temperature

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|---|---|
| **tbrp:** | Boiling point at reduced pressure |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |