# Propanoic acid, 2-(4-methoxyphenyl)

**Other names:** 2-(4-Methoxyphenyl)propanoic acid
**Inchi:** InChI=1S/C10H12O3/c1-7(10(11)12)8-3-5-9(13-2)6-4-8/h3-7H,1-2H3,(H,11,12)
**InchiKey:** KBDLTYNZHQRMQC-UHFFFAOYSA-N
**Formula:** C10H12O3
**SMILES:** COc1ccc(C(C)C(=O)O)cc1
**Mol. weight [g/mol]:** 180.20

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -237.08 | kJ/mol | Joback Method |
| hf | -426.98 | kJ/mol | Joback Method |
| hfus | 18.66 | kJ/mol | Joback Method |
| hvap | 66.24 | kJ/mol | Joback Method |
| log10ws | -1.88 | | Crippen Method |
| logp | 1.883 | | Crippen Method |
| mcvol | 141.310 | ml/mol | McGowan Method |
| pc | 3395.98 | kPa | Joback Method |
| rinpol | 1529.00 | | NIST Webbook |
| rinpol | 1529.00 | | NIST Webbook |
| rinpol | 1529.00 | | NIST Webbook |
| tb | 627.89 | K | Joback Method |
| tc | 831.09 | K | Joback Method |
| tf | 359.38 | K | Joback Method |
| vc | 0.524 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 350.72 | J/mol×K | 627.89 | Joback Method |
| cpg | 361.92 | J/mol×K | 661.76 | Joback Method |
| cpg | 372.47 | J/mol×K | 695.62 | Joback Method |
| cpg | 382.39 | J/mol×K | 729.49 | Joback Method |
| cpg | 391.69 | J/mol×K | 763.36 | Joback Method |
| cpg | 400.38 | J/mol×K | 797.22 | Joback Method |

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|---|---|---|---|---|
| cpg | 408.47 | J/mol×K | 831.09 | Joback Method |
| dvisc | 0.0033905 | Pa×s | 359.38 | Joback Method |
| dvisc | 0.0012040 | Pa×s | 404.13 | Joback Method |
| dvisc | 0.0005256 | Pa×s | 448.88 | Joback Method |
| dvisc | 0.0002667 | Pa×s | 493.63 | Joback Method |
| dvisc | 0.0001515 | Pa×s | 538.39 | Joback Method |
| dvisc | 0.0000938 | Pa×s | 583.14 | Joback Method |
| dvisc | 0.0000622 | Pa×s | 627.89 | Joback Method |

# 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=R31668&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
**rinpol:** Non-polar retention indices
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume

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