

# Cyclopentanecarboxylic acid, 4-methoxyphenyl ester

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C13H16O3/c1-15-11-6-8-12(9-7-11)16-13(14)10-4-2-3-5-10/h6-10H,2-5H2,1H3 |
| <b>InchiKey:</b>            | ORMAVLLFHICVKM-UHFFFAOYSA-N  |
| <b>Formula:</b>             | C13H16O3   |
| <b>SMILES:</b>              | COc1ccc(OC(=O)C2CCCC2)cc1  |
| <b>Mol. weight [g/mol]:</b> | 220.26   |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -141.01 | kJ/mol  | Joback Method  |
| hf            | -403.13 | kJ/mol  | Joback Method  |
| hfus          | 20.99   | kJ/mol  | Joback Method  |
| hvap          | 59.29   | kJ/mol  | Joback Method  |
| log10ws       | -3.23   |         | Crippen Method |
| logp          | 2.791   |         | Crippen Method |
| mcvol         | 172.720 | ml/mol  | McGowan Method |
| pc            | 2654.29 | kPa     | Joback Method  |
| rinpol        | 1741.00 |         | NIST Webbook   |
| tb            | 642.49  | K       | Joback Method  |
| tc            | 872.23  | K       | Joback Method  |
| tf            | 380.50  | K       | Joback Method  |
| vc            | 0.638   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 458.45    | J/molxK | 642.49          | Joback Method |
| cpg           | 475.92    | J/molxK | 680.78          | Joback Method |
| cpg           | 492.20    | J/molxK | 719.07          | Joback Method |
| cpg           | 507.33    | J/molxK | 757.36          | Joback Method |
| cpg           | 521.33    | J/molxK | 795.65          | Joback Method |
| cpg           | 534.21    | J/molxK | 833.94          | Joback Method |
| cpg           | 546.01    | J/molxK | 872.23          | Joback Method |
| dvisc         | 0.0014553 | Paxs    | 380.50          | Joback Method |
| dvisc         | 0.0008662 | Paxs    | 424.17          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0005679 | Paxs | 467.83 | Joback Method |
| dvisc | 0.0004002 | Paxs | 511.50 | Joback Method |
| dvisc | 0.0002980 | Paxs | 555.16 | Joback Method |
| dvisc | 0.0002316 | Paxs | 598.83 | Joback Method |
| dvisc | 0.0001863 | Paxs | 642.49 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U307577&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U307577&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |

## Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

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