

# R,S-4'-Methoxy-«alpha»-pyrrolidinopropiophenone

Other names: R,S-3',4'-methylenedioxy-«alpha»-pyrrolidinopropiophenone-M  
(desmethyl-3-methoxy-desamino-oxo-),  
ethylated  
Inchi: InChI=1S/C12H14O4/c1-4-16-10-6-5-9(7-11(10)15-3)12(14)8(2)13/h5-7H,4H2,1-3H3  
PubKey: PFGFBGCGXNIEJR-UHFFFAOYSA-N  
Formula: C12H14O4  
SMILES: CCOc1ccc(C(=O)C(C)=O)cc1OC  
Mol. weight [g/mol]: 222.24

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -324.53 | kJ/mol  | Joback Method  |
| hf            | -567.02 | kJ/mol  | Joback Method  |
| hfus          | 25.67   | kJ/mol  | Joback Method  |
| hvap          | 64.22   | kJ/mol  | Joback Method  |
| log10ws       | -2.49   |         | Crippen Method |
| logp          | 1.866   |         | Crippen Method |
| mcvol         | 171.060 | ml/mol  | McGowan Method |
| pc            | 2558.51 | kPa     | Joback Method  |
| rinpol        | 1680.00 |         | NIST Webbook   |
| rinpol        | 1680.00 |         | NIST Webbook   |
| tb            | 663.18  | K       | Joback Method  |
| tc            | 875.86  | K       | Joback Method  |
| tf            | 420.78  | K       | Joback Method  |
| vc            | 0.647   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 435.52 | J/molxK | 663.18          | Joback Method |
| cpg           | 448.70 | J/molxK | 698.63          | Joback Method |
| cpg           | 461.11 | J/molxK | 734.07          | Joback Method |
| cpg           | 472.74 | J/molxK | 769.52          | Joback Method |
| cpg           | 483.58 | J/molxK | 804.97          | Joback Method |
| cpg           | 493.62 | J/molxK | 840.42          | Joback Method |
| cpg           | 502.86 | J/molxK | 875.86          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0009239 | Paxs | 420.78 | Joback Method |
| dvisc | 0.0005957 | Paxs | 461.18 | Joback Method |
| dvisc | 0.0004122 | Paxs | 501.58 | Joback Method |
| dvisc | 0.0003014 | Paxs | 541.98 | Joback Method |
| dvisc | 0.0002301 | Paxs | 582.38 | Joback Method |
| dvisc | 0.0001820 | Paxs | 622.78 | Joback Method |
| dvisc | 0.0001481 | Paxs | 663.18 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R290625&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R290625&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>                     |

## 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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