

# Benzeneacetic acid, 3-methoxy-, methyl ester

|                      |                                                                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other names:         | Acetic acid, (m-methoxyphenyl)-, methyl ester<br>Methyl (3-methoxyphenyl)acetate<br>Methyl m-methoxyphenylacetate<br>Methyl 2-(m-methoxyphenyl)acetate<br>Acetic acid, 3-methoxyphenoxy, methyl ester<br>(3-Methoxy-phenyl)-acetic acid methyl ester |
| Inchi:               | InChI=1S/C10H12O3/c1-12-9-5-3-4-8(6-9)7-10(11)13-2/h3-6H,7H2,1-2H3                                                                                                                                                                                   |
| InchiKey:            | BSVIOYCZTJRBDDB-UHFFFAOYSA-N                                                                                                                                                                                                                         |
| Formula:             | C10H12O3                                                                                                                                                                                                                                             |
| SMILES:              | COC(=O)Cc1cccc(OC)c1                                                                                                                                                                                                                                 |
| Mol. weight [g/mol]: | 180.20                                                                                                                                                                                                                                               |
| CAS:                 | 18927-05-4                                                                                                                                                                                                                                           |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -202.82 | kJ/mol  | Joback Method  |
| hf            | -401.69 | kJ/mol  | Joback Method  |
| hfus          | 19.28   | kJ/mol  | Joback Method  |
| hvap          | 52.36   | kJ/mol  | Joback Method  |
| log10ws       | -1.68   |         | Crippen Method |
| logp          | 1.411   |         | Crippen Method |
| mcvol         | 141.310 | ml/mol  | McGowan Method |
| pc            | 2976.29 | kPa     | Joback Method  |
| rinpol        | 1416.90 |         | NIST Webbook   |
| rinpol        | 1380.00 |         | NIST Webbook   |
| rinpol        | 1380.00 |         | NIST Webbook   |
| rinpol        | 1416.90 |         | NIST Webbook   |
| rinpol        | 1380.00 |         | NIST Webbook   |
| tb            | 558.57  | K       | Joback Method  |
| tc            | 770.06  | K       | Joback Method  |
| tf            | 335.79  | K       | Joback Method  |
| vc            | 0.529   | m3/kmol | Joback Method  |

# Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 323.98    | J/mol×K | 558.57          | Joback Method |
| cpg           | 337.02    | J/mol×K | 593.82          | Joback Method |
| cpg           | 349.42    | J/mol×K | 629.07          | Joback Method |
| cpg           | 361.16    | J/mol×K | 664.31          | Joback Method |
| cpg           | 372.24    | J/mol×K | 699.56          | Joback Method |
| cpg           | 382.66    | J/mol×K | 734.81          | Joback Method |
| cpg           | 392.43    | J/mol×K | 770.06          | Joback Method |
| dvisc         | 0.0013400 | Pa×s    | 335.79          | Joback Method |
| dvisc         | 0.0008036 | Pa×s    | 372.92          | Joback Method |
| dvisc         | 0.0005287 | Pa×s    | 410.05          | Joback Method |
| dvisc         | 0.0003728 | Pa×s    | 447.18          | Joback Method |
| dvisc         | 0.0002774 | Pa×s    | 484.31          | Joback Method |
| dvisc         | 0.0002153 | Pa×s    | 521.44          | Joback Method |
| dvisc         | 0.0001728 | Pa×s    | 558.57          | Joback Method |

## Sources

|                 |                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Crippen Method: | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                             |
| Joback Method:  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                         |
| McGowan Method: | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                         |
| NIST Webbook:   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C18927054&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C18927054&amp;Units=SI</a> |
| Crippen Method: | <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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