

# 3-Bromobenzoic acid, but-3-yn-2-yl ester

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| Inchi:               | InChI=1S/C11H9BrO2/c1-3-8(2)14-11(13)9-5-4-6-10(12)7-9/h1,4-8H,2H3 |
| InchiKey:            | MYMIMMHESYRMIQ-UHFFFAOYSA-N                                        |
| Formula:             | C11H9BrO2                                                          |
| SMILES:              | C#CC(C)OC(=O)c1cccc(Br)c1                                          |
| Mol. weight [g/mol]: | 253.09                                                             |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 145.55  | kJ/mol  | Joback Method  |
| hf            | 22.84   | kJ/mol  | Joback Method  |
| hfus          | 25.42   | kJ/mol  | Joback Method  |
| hvap          | 58.08   | kJ/mol  | Joback Method  |
| log10ws       | -4.04   |         | Crippen Method |
| logp          | 2.628   |         | Crippen Method |
| mcvol         | 158.430 | ml/mol  | McGowan Method |
| pc            | 3513.74 | kPa     | Joback Method  |
| rinpol        | 1514.00 |         | NIST Webbook   |
| rinpol        | 1514.00 |         | NIST Webbook   |
| tb            | 614.87  | K       | Joback Method  |
| tc            | 858.99  | K       | Joback Method  |
| tf            | 416.60  | K       | Joback Method  |
| vc            | 0.586   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 343.42 | J/mol×K | 614.87          | Joback Method |
| cpg           | 355.28 | J/mol×K | 655.56          | Joback Method |
| cpg           | 366.25 | J/mol×K | 696.24          | Joback Method |
| cpg           | 376.39 | J/mol×K | 736.93          | Joback Method |
| cpg           | 385.74 | J/mol×K | 777.61          | Joback Method |
| cpg           | 394.33 | J/mol×K | 818.30          | Joback Method |
| cpg           | 402.22 | J/mol×K | 858.99          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <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=U299139&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U299139&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>                                 |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>                         |

# Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <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>rinpola:</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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