

# 2-Aminothiophenol, N,S-diacetyl-

|                      |                                                                               |
|----------------------|-------------------------------------------------------------------------------|
| Inchi:               | InChI=1S/C10H11NO2S/c1-7(12)11-9-5-3-4-6-10(9)14-8(2)13/h3-6H,1-2H3,(H,11,12) |
| InchiKey:            | YQGDQHHQENADMX-UHFFFAOYSA-N                                                   |
| Formula:             | C10H11NO2S                                                                    |
| SMILES:              | CC(=O)Nc1ccccc1SC(C)=O                                                        |
| Mol. weight [g/mol]: | 209.26                                                                        |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 0.77    | kJ/mol  | Joback Method  |
| hf            | -154.49 | kJ/mol  | Joback Method  |
| hfus          | 27.73   | kJ/mol  | Joback Method  |
| hvap          | 67.54   | kJ/mol  | Joback Method  |
| log10ws       | -2.61   |         | Crippen Method |
| logp          | 2.284   |         | Crippen Method |
| mcvol         | 157.470 | ml/mol  | McGowan Method |
| pc            | 3435.91 | kPa     | Joback Method  |
| rinpol        | 1776.60 |         | NIST Webbook   |
| tb            | 686.55  | K       | Joback Method  |
| tc            | 926.64  | K       | Joback Method  |
| tf            | 428.32  | K       | Joback Method  |
| vc            | 0.589   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 386.22 | J/mol×K | 686.55          | Joback Method |
| cpg           | 398.07 | J/mol×K | 726.56          | Joback Method |
| cpg           | 408.98 | J/mol×K | 766.58          | Joback Method |
| cpg           | 418.97 | J/mol×K | 806.59          | Joback Method |
| cpg           | 428.06 | J/mol×K | 846.61          | Joback Method |
| cpg           | 436.30 | J/mol×K | 886.62          | Joback Method |
| cpg           | 443.70 | J/mol×K | 926.64          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>                                 |
| <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=U353082&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U353082&amp;Units=SI</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>hvac:</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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