# O-aminobenzenesulfonamide

| | |
|---|---|
| **Other names:** | 2-aminobenzenesulfonamide |
| | o-aminobenzenesulphonamide |
| **Inchi:** | InChI=1S/C6H8N2O2S/c7-5-3-1-2-4-6(5)11(8,9)10/h1-4H,7H2,(H2,8,9,10) |
| **InchiKey:** | YAZSBRQTAHVVGE-UHFFFAOYSA-N |
| **Formula:** | C6H8N2O2S |
| **SMILES:** | Nc1ccccc1S(N)(=O)=O |
| **Mol. weight [g/mol]:** | 172.21 |
| **CAS:** | 3306-62-5 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -233.22 | kJ/mol | Joback Method |
| hf | -327.88 | kJ/mol | Joback Method |
| hfus | 23.44 | kJ/mol | Enthalpies of combustion and formation of benzenesulfonamide and some of its derivatives |
| hvap | 71.81 | kJ/mol | Joback Method |
| log10ws | -0.80 | | Crippen Method |
| logp | -0.084 | | Crippen Method |
| mcvol | 119.690 | ml/mol | McGowan Method |
| pc | 6841.44 | kPa | Joback Method |
| tb | 561.18 | K | Joback Method |
| tc | 794.22 | K | Joback Method |
| tf | 401.40 | K | Joback Method |
| vc | 0.448 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 269.49 | J/mol×K | 561.18 | Joback Method |
| cpg | 280.30 | J/mol×K | 600.02 | Joback Method |
| cpg | 290.34 | J/mol×K | 638.86 | Joback Method |
| cpg | 299.63 | J/mol×K | 677.70 | Joback Method |
| cpg | 308.17 | J/mol×K | 716.54 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 315.97 | J/mol×K | 755.38 | Joback Method |
| cpg | 323.03 | J/mol×K | 794.22 | Joback Method |

# Sources

| | |
|---|---|
| **Enthalpies of combustion and formation of benzenesulfonamide and some of its derivatives:** | https://www.doi.org/10.1016/j.jct.2011.11.026 |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C3306625&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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