# Asulam

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|---|---|
| **Other names:** | 4-Amino-benzolsulfonyl-methylcarbamat |
| | Asilan |
| | Asulfox F |
| | Asulox |
| | Asulox 40 |
| | Asulox F |
| | Carbamic acid, 4-aminobenzenesulfonyl-, methyl ester |
| | Carbamic acid, [(4-aminophenyl)sulfonyl]-, methyl ester |
| | Carbamic acid, sulfanilyl-, methyl ester |
| | Jonnix |
| | M and B 9057 |
| | MB 9057 |
| | Methyl (4-aminophenylsulfonyl)carbamate |
| | Methyl 4-aminobenzenesulfonylcarbamate |
| | Methyl 4-aminobenzenesulphonyl carbamate |
| | Methyl 4-aminophenylsulphonyl carbamate |
| | Methyl N-(4-aminobenzenesulfonyl)carbamate |
| | Methyl p-aminobenzenesulfonylcarbamate |
| | Methyl sulfanilyl carbamate |
| | N1-Methoxycarbonylsulfanilamide |
| **Inchi:** | InChI=1S/C8H10N2O4S/c1-14-8(11)10-15(12,13)7-4-2-6(9)3-5-7/h2-5H,9H2,1H3,(H,10,1 |
| **InchiKey:** | VGPYEHKOIGNJKV-UHFFFAOYSA-N |
| **Formula:** | C8H10N2O4S |
| **SMILES:** | COC(=O)NS(=O)(=O)c1ccc(N)cc1 |
| **Mol. weight [g/mol]:** | 230.24 |
| **CAS:** | 3337-71-1 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -427.36 | kJ/mol | Joback Method |
| hf | -594.28 | kJ/mol | Joback Method |
| hfus | 34.59 | kJ/mol | Joback Method |
| hvap | 81.21 | kJ/mol | Joback Method |
| log10ws | -1.66 | | Aqueous Solubility Prediction Method |
| logp | 0.314 | | Crippen Method |
| mcvol | 155.310 | ml/mol | McGowan Method |

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|---|---|---|---|
| pc | 5109.34 | kPa | Joback Method |
| tb | 660.87 | K | Joback Method |
| tc | 880.81 | K | Joback Method |
| tf | 417.30 ± 0.20 | K | NIST Webbook |
| vc | 0.590 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 388.95 | J/mol×K | 660.87 | Joback Method |
| cpg | 400.21 | J/mol×K | 697.53 | Joback Method |
| cpg | 410.62 | J/mol×K | 734.18 | Joback Method |
| cpg | 420.17 | J/mol×K | 770.84 | Joback Method |
| cpg | 428.86 | J/mol×K | 807.50 | Joback Method |
| cpg | 436.68 | J/mol×K | 844.16 | Joback Method |
| cpg | 443.63 | J/mol×K | 880.81 | Joback Method |

# Sources

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**Aqueous Solubility Prediction Method:** http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C3337711&Units=SI

# 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

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|---|---|
| **pc:** | Critical Pressure |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |