# N-Acetylsulfanilyl chloride

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|---|---|
| **Other names:** | p-Acetaminobenzenesulfonyl chloride |
| | p-Acetyl aminobenzene sulfonyl chloride |
| | 4-Acetamidobenzenesulfonyl chloride |
| | Benzenesulfonyl chloride, 4-(acetylamino)- |
| | p-Acetamidobenzenesulfonyl chloride |
| | p-Acetamidophenylsulfonyl chloride |
| | p-Acetylaminobenzenesulfochloride |
| | Acetanilide-p-sulfonyl chloride |
| | Acetylsulfanilyl chloride |
| | ASC |
| | Dagenan chloride |
| | N4-Acetylsulfanilyl chloride |
| | Sulfanilyl chloride, N-acetyl- |
| | 4-Acetamidophenylsulfonyl chloride |
| | 4'-(Chlorosulfonyl)acetanilide |
| | 4-Acetylamino-benzenesulfonyl chloride |
| | 4-Chlorosulfonylacetanilide |
| | NSC 127860 |
| | p-(Chlorosulfonyl)acetanilide |
| | N-acetylsulphanilyl chloride |
| **Inchi:** | InChI=1S/C8H8ClNO3S/c1-6(11)10-7-2-4-8(5-3-7)14(9,12)13/h2-5H,1H3,(H,10,11) |
| **InchiKey:** | GRDXCFKBQWDAJH-UHFFFAOYSA-N |
| **Formula:** | C8H8ClNO3S |
| **SMILES:** | CC(=O)Nc1ccc(S(=O)(=O)Cl)cc1 |
| **Mol. weight [g/mol]:** | 233.67 |
| **CAS:** | 121-60-8 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -400.74 | kJ/mol | Joback Method |
| hf | -511.59 | kJ/mol | Joback Method |
| hfus | 32.40 | kJ/mol | Joback Method |
| hvap | 72.54 | kJ/mol | Joback Method |
| log10ws | -2.09 | | Crippen Method |
| logp | 1.573 | | Crippen Method |
| mcvol | 151.700 | ml/mol | McGowan Method |
| pc | 4590.15 | kPa | Joback Method |

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|---|---|---|---|
| tb | 603.35 | K | Joback Method |
| tc | 822.48 | K | Joback Method |
| tf | 389.93 | K | Joback Method |
| vc | 0.592 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 334.94 | J/mol×K | 603.35 | Joback Method |
| cpg | 346.01 | J/mol×K | 639.87 | Joback Method |
| cpg | 356.28 | J/mol×K | 676.39 | Joback Method |
| cpg | 365.76 | J/mol×K | 712.92 | Joback Method |
| cpg | 374.46 | J/mol×K | 749.44 | Joback Method |
| cpg | 382.40 | J/mol×K | 785.96 | Joback Method |
| cpg | 389.57 | J/mol×K | 822.48 | Joback Method |

# Sources

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**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=C121608&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
**pc:** Critical Pressure

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