# Acetic acid, [(benzoylamino)oxy]-

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|---|---|
| **Other names:** | Benzadox |
| | Acetic acid, (benzamidooxy)- |
| | Benzamidooxyacetic acid |
| | Benzamidoxyacetic acid |
| | Hydroxylamine, N-benzoyl-O-(carboxymethyl)- |
| | S 6173 |
| | o-Benzamidoglycolic acid |
| | ((Benzoylamino)oxy)acetic acid |
| | S-7,173 |
| | S-7173 |
| | Topcide |
| | Topicide |
| | NSC 75601 |
| **Inchi:** | InChI=1S/C9H9NO4/c11-8(12)6-14-10-9(13)7-4-2-1-3-5-7/h1-5H,6H2,(H,10,13)(H,11,12) |
| **InchiKey:** | WDRGQGLIUAMOOC-UHFFFAOYSA-N |
| **Formula:** | C9H9NO4 |
| **SMILES:** | O=C(O)CONC(=O)c1ccccc1 |
| **Mol. weight [g/mol]:** | 195.17 |
| **CAS:** | 5251-93-4 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -272.96 | kJ/mol | Joback Method |
| hf | -448.70 | kJ/mol | Joback Method |
| hfus | 26.68 | kJ/mol | Joback Method |
| hvap | 76.92 | kJ/mol | Joback Method |
| log10ws | -1.41 | | Crippen Method |
| logp | 0.433 | | Crippen Method |
| mcvol | 138.770 | ml/mol | McGowan Method |
| pc | 4233.04 | kPa | Joback Method |
| tb | 704.51 | K | Joback Method |
| tc | 912.69 | K | Joback Method |
| tf | 417.66 ± 0.20 | K | NIST Webbook |
| tf | 417.60 ± 0.20 | K | NIST Webbook |
| vc | 0.515 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 360.04 | J/mol×K | 704.51 | Joback Method |
| cpg | 369.10 | J/mol×K | 739.21 | Joback Method |
| cpg | 377.50 | J/mol×K | 773.90 | Joback Method |
| cpg | 385.26 | J/mol×K | 808.60 | Joback Method |
| cpg | 392.38 | J/mol×K | 843.30 | Joback Method |
| cpg | 398.90 | J/mol×K | 877.99 | Joback Method |
| cpg | 404.82 | J/mol×K | 912.69 | Joback Method |
| hfust | 31.46 | kJ/mol | 416.90 | NIST Webbook |
| hfust | 31.46 | kJ/mol | 416.90 | NIST Webbook |

# Sources

**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=C5251934&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# 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
**hfust:** Enthalpy of fusion at a given temperature
**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