

# Pyridine, 4-methyl-, 1-oxide

|                      |                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other names:         | «gamma»-Picoline N-oxide<br>4-Picoline, 1-oxide<br>«gamma»-Picoline 1-oxide<br>4-Methylpyridine N-oxide<br>4-Methylpyridine 1-oxide<br>4-Picoline N-oxide |
| Inchi:               | InChI=1S/C6H7NO/c1-6-2-4-7(8)5-3-6/h2-5H,1H3                                                                                                              |
| InchiKey:            | IWYYIZOHWPICALJ-UHFFFAOYSA-N                                                                                                                              |
| Formula:             | C6H7NO                                                                                                                                                    |
| SMILES:              | Cc1cc[n+](O-)cc1                                                                                                                                          |
| Mol. weight [g/mol]: | 109.13                                                                                                                                                    |
| CAS:                 | 1003-67-4                                                                                                                                                 |

## Physical Properties

| Property code | Value           | Unit   | Source         |
|---------------|-----------------|--------|----------------|
| chs           | -3360.90 ± 2.10 | kJ/mol | NIST Webbook   |
| hfs           | -0.50 ± 2.10    | kJ/mol | NIST Webbook   |
| hfs           | 12.90 ± 0.90    | kJ/mol | NIST Webbook   |
| hsub          | 85.30 ± 2.60    | kJ/mol | NIST Webbook   |
| hsub          | 79.10 ± 1.30    | kJ/mol | NIST Webbook   |
| ie            | 8.17            | eV     | NIST Webbook   |
| ie            | 8.12 ± 0.02     | eV     | NIST Webbook   |
| log10ws       | -3.48           |        | Crippen Method |
| logp          | 0.628           |        | Crippen Method |
| mcvol         | 87.490          | ml/mol | McGowan Method |

## Temperature Dependent Properties

| Property code | Value        | Unit   | Temperature [K] | Source       |
|---------------|--------------|--------|-----------------|--------------|
| hsubt         | 79.10 ± 1.30 | kJ/mol | 328.50          | NIST Webbook |

# Sources

|                        |                                                                                                                                             |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C1003674&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1003674&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                       |

## Legend

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| <b>chs:</b>     | Standard solid enthalpy of combustion                    |
| <b>hfs:</b>     | Solid phase enthalpy of formation at standard conditions |
| <b>hsub:</b>    | Enthalpy of sublimation at standard conditions           |
| <b>hsubt:</b>   | Enthalpy of sublimation at a given temperature           |
| <b>ie:</b>      | Ionization energy                                        |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l                       |
| <b>logp:</b>    | Octanol/Water partition coefficient                      |
| <b>mcvol:</b>   | McGowan's characteristic volume                          |

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