

2,5-Dimethyltetrahydrofuran-3-one

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|-----------------------------|---|
| Inchi: | InChI=1S/C6H10O2/c1-4-3-6(7)5(2)8-4/h4-5H,3H2,1-2H3 |
| InchiKey: | PAZYIUKTJFPTKT-UHFFFAOYSA-N |
| Formula: | C6H10O2 |
| SMILES: | CC1CC(=O)C(C)O1 |
| Mol. weight [g/mol]: | 114.14 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -180.23 | kJ/mol | Joback Method |
| hf | -396.73 | kJ/mol | Joback Method |
| hfus | 13.79 | kJ/mol | Joback Method |
| hvap | 37.66 | kJ/mol | Joback Method |
| log10ws | -0.82 | | Crippen Method |
| logp | 0.753 | | Crippen Method |
| mcvol | 91.980 | ml/mol | McGowan Method |
| pc | 3805.69 | kPa | Joback Method |
| ripol | 1242.00 | | NIST Webbook |
| ripol | 1242.00 | | NIST Webbook |
| ripol | 1340.00 | | NIST Webbook |
| tb | 442.06 | K | Joback Method |
| tc | 658.70 | K | Joback Method |
| tf | 258.83 | K | Joback Method |
| vc | 0.340 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 193.95 | J/molxK | 442.06 | Joback Method |
| cpg | 207.25 | J/molxK | 478.17 | Joback Method |
| cpg | 220.06 | J/molxK | 514.27 | Joback Method |
| cpg | 232.37 | J/molxK | 550.38 | Joback Method |
| cpg | 244.15 | J/molxK | 586.49 | Joback Method |
| cpg | 255.40 | J/molxK | 622.59 | Joback Method |
| cpg | 266.11 | J/molxK | 658.70 | Joback Method |

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=R314726&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307I |

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 |
| ripol: | Polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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