

Tetrahydrofuran-2-carbaldehyde

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| Inchi: | InChI=1S/C5H8O2/c6-4-5-2-1-3-7-5/h4-5H,1-3H2 |
| InchiKey: | BBNYLDSWVXSNOQ-UHFFFAOYSA-N |
| Formula: | C5H8O2 |
| SMILES: | O=CC1CCCO1 |
| Mol. weight [g/mol]: | 100.12 |
| CAS: | 79710-86-4 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -157.87 | kJ/mol | Joback Method |
| hf | -303.63 | kJ/mol | Joback Method |
| hfl | -318.70 | kJ/mol | NIST Webbook |
| hfus | 12.91 | kJ/mol | Joback Method |
| hvap | 38.21 | kJ/mol | Joback Method |
| log10ws | -0.29 | | Crippen Method |
| logp | 0.364 | | Crippen Method |
| mcvol | 77.890 | ml/mol | McGowan Method |
| pc | 4736.62 | kPa | Joback Method |
| tb | 404.69 | K | Joback Method |
| tc | 610.69 | K | Joback Method |
| tf | 225.58 | K | Joback Method |
| vc | 0.294 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 149.12 | J/molxK | 404.69 | Joback Method |
| cpg | 160.24 | J/molxK | 439.02 | Joback Method |
| cpg | 170.76 | J/molxK | 473.36 | Joback Method |
| cpg | 180.71 | J/molxK | 507.69 | Joback Method |
| cpg | 190.09 | J/molxK | 542.03 | Joback Method |
| cpg | 198.94 | J/molxK | 576.36 | Joback Method |
| cpg | 207.26 | J/molxK | 610.69 | Joback Method |
| dvisc | 0.0041829 | Paxs | 225.58 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0023516 | Paxs | 255.43 | Joback Method |
| dvisc | 0.0014914 | Paxs | 285.28 | Joback Method |
| dvisc | 0.0010311 | Paxs | 315.13 | Joback Method |
| dvisc | 0.0007598 | Paxs | 344.99 | Joback Method |
| dvisc | 0.0005879 | Paxs | 374.84 | Joback Method |
| dvisc | 0.0004724 | Paxs | 404.69 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.cheméo.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=C79710864&Units=SI |

Legend

| | |
|-----------------|---|
| cpg: | Ideal gas heat capacity |
| dvisc: | Dynamic viscosity |
| gf: | Standard Gibbs free energy of formation |
| hf: | Enthalpy of formation at standard conditions |
| hfl: | Liquid phase 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 |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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