# 2-Pentanol, 5-(2-propynyloxy)-

**Other names:** 5-(2-propynyloxy)-2-pentanol
**Inchi:** InChI=1S/C8H14O2/c1-3-6-10-7-4-5-8(2)9/h1,8-9H,4-7H2,2H3
**InchiKey:** GIMRTZTZHZCXQX-UHFFFAOYSA-N
**Formula:** C8H14O2
**SMILES:** C#CCOCCCC(C)O
**Mol. weight [g/mol]:** 142.20
**CAS:** 55702-67-5

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -4.71 | kJ/mol | Joback Method |
| hf | -206.28 | kJ/mol | Joback Method |
| hfus | 21.20 | kJ/mol | Joback Method |
| hvap | 51.96 | kJ/mol | Joback Method |
| log10ws | -1.43 | | Crippen Method |
| logp | 0.797 | | Crippen Method |
| mcvol | 126.720 | ml/mol | McGowan Method |
| pc | 3246.73 | kPa | Joback Method |
| tb | 486.72 | K | Joback Method |
| tc | 659.55 | K | Joback Method |
| tf | 294.94 | K | Joback Method |
| vc | 0.476 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 281.63 | J/mol×K | 486.72 | Joback Method |
| cpg | 291.96 | J/mol×K | 515.53 | Joback Method |
| cpg | 301.90 | J/mol×K | 544.33 | Joback Method |
| cpg | 311.44 | J/mol×K | 573.14 | Joback Method |
| cpg | 320.59 | J/mol×K | 601.94 | Joback Method |
| cpg | 329.37 | J/mol×K | 630.75 | Joback Method |
| cpg | 337.78 | J/mol×K | 659.55 | 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=C55702675&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 |
| **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 |