# 3-Penten-1-ol, (z)-

**Other names:** (Z)-3-pentenol
(Z)-Pent-3-en-1-ol
**Inchi:** InChI=1S/C5H10O/c1-2-3-4-5-6/h2-3,6H,4-5H2,1H3/b3-2-
**InchiKey:** FSUXYWPILZJGCC-IHWYPQMZSA-N
**Formula:** C5H10O
**SMILES:** C/C=C\CCO
**Mol. weight [g/mol]:** 86.13

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.5481 | | Cheméo Relay (1.0) |
| gf | -65.38 | kJ/mol | Joback Method |
| hf | -191.32 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 13.00 | kJ/mol | Joback Method |
| hvap | 54.78 | kJ/mol | Cheméo Relay (1.0) |
| ie | 9.16 | eV | Cheméo Relay (1.0) |
| logp | 0.945 | | Crippen Method |
| mcvol | 82.880 | ml/mol | McGowan Method |
| pc | 4140.93 | kPa | Joback Method |
| rinpol | 725.00 | | NIST Webbook |
| rinpol | 725.00 | | NIST Webbook |
| ripol | 1307.00 | | NIST Webbook |
| tb | 414.00 ± 5.00 | K | NIST Webbook |
| tc | 595.27 | K | Cheméo Relay (1.0) |
| tf | 175.36 | K | Cheméo Relay (1.0) |
| vc | 0.284 | m3/kmol | Cheméo Relay (1.0) |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 154.30 | J/mol×K | 410.14 | Joback Method |
| cpg | 162.28 | J/mol×K | 438.41 | Joback Method |
| cpg | 169.90 | J/mol×K | 466.68 | Joback Method |
| cpg | 177.18 | J/mol×K | 494.94 | Joback Method |

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|---|---|---|---|---|
| cpg | 184.13 | J/mol×K | 523.21 | Joback Method |
| cpg | 190.77 | J/mol×K | 551.48 | Joback Method |
| cpg | 197.11 | J/mol×K | 579.75 | Joback Method |
| dvisc | 0.1185690 | Pa×s | 201.85 | Joback Method |
| dvisc | 0.0195828 | Pa×s | 236.56 | Joback Method |
| dvisc | 0.0051279 | Pa×s | 271.28 | Joback Method |
| dvisc | 0.0018199 | Pa×s | 306.00 | Joback Method |
| dvisc | 0.0007977 | Pa×s | 340.71 | Joback Method |
| dvisc | 0.0004073 | Pa×s | 375.42 | Joback Method |
| dvisc | 0.0002330 | Pa×s | 410.14 | Joback Method |

# Sources

**Cheméo Relay (1.0):**

**Cheméo Relay (1.0, beta):**

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C764385&Units=SI

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

# Legend

**af:** Acentric Factor
**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**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
**ie:** Ionization energy
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**pc:** Critical Pressure
**rinpol:** Non-polar retention indices
**ripol:** Polar retention indices
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature

**tf:** Normal melting (fusion) point

**vc:** Critical Volume