# 2-Ethyl-1-butanol, methyl ether

**Inchi:** InChI=1S/C7H16O/c1-4-7(5-2)6-8-3/h7H,4-6H2,1-3H3
**InchiKey:** JWXGQJXUAIXQEP-UHFFFAOYSA-N
**Formula:** C7H16O
**SMILES:** CCC(CC)COC
**Mol. weight [g/mol]:** 116.20

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -99.38 | kJ/mol | Joback Method |
| hf | -325.31 | kJ/mol | Joback Method |
| hfus | 11.55 | kJ/mol | Joback Method |
| hvap | 33.20 | kJ/mol | Joback Method |
| log10ws | -1.60 | | Crippen Method |
| logp | 2.069 | | Crippen Method |
| mcvol | 115.360 | ml/mol | McGowan Method |
| pc | 2773.00 | kPa | Joback Method |
| rinpol | 782.00 | | NIST Webbook |
| rinpol | 782.00 | | NIST Webbook |
| tb | 381.54 | K | Joback Method |
| tc | 549.69 | K | Joback Method |
| tf | 175.88 | K | Joback Method |
| vc | 0.440 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 218.33 | J/mol×K | 381.54 | Joback Method |
| cpg | 230.17 | J/mol×K | 409.57 | Joback Method |
| cpg | 241.65 | J/mol×K | 437.59 | Joback Method |
| cpg | 252.77 | J/mol×K | 465.62 | Joback Method |
| cpg | 263.53 | J/mol×K | 493.64 | Joback Method |
| cpg | 273.94 | J/mol×K | 521.67 | Joback Method |
| cpg | 284.00 | J/mol×K | 549.69 | Joback Method |
| dvisc | 0.0068890 | Pa×s | 175.88 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0024170 | Pa×s | 210.16 | Joback Method |
| dvisc | 0.0011375 | Pa×s | 244.43 | Joback Method |
| dvisc | 0.0006444 | Pa×s | 278.71 | Joback Method |
| dvisc | 0.0004135 | Pa×s | 312.99 | Joback Method |
| dvisc | 0.0002896 | Pa×s | 347.26 | Joback Method |
| dvisc | 0.0002162 | Pa×s | 381.54 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U333925&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |

# Legend

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|---|---|
| **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 |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |