# 3-Hexenoic acid, ethyl ester, (Z)-

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|---|---|
| **Other names:** | Ethyl (3Z)-3-hexenoate |
| | Ethyl cis-hex-3-enoate |
| | Ethyl (Z)-3-hexenoate |
| | Ethyl (Z)-hex-3-enoate |
| **Inchi:** | InChI=1S/C8H14O2/c1-3-5-6-7-8(9)10-4-2/h5-6H,3-4,7H2,1-2H3/b6-5- |
| **InchiKey:** | VTSFIPHRNAESED-WAYWQWQTSA-N |
| **Formula:** | C8H14O2 |
| **SMILES:** | CCC=CCC(=O)OCC |
| **Mol. weight [g/mol]:** | 142.20 |
| **CAS:** | 64187-83-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -137.22 | kJ/mol | Joback Method |
| hf | -336.03 | kJ/mol | Joback Method |
| hfus | 19.46 | kJ/mol | Joback Method |
| hvap | 42.52 | kJ/mol | Joback Method |
| log10ws | -1.89 | | Crippen Method |
| logp | 1.906 | | Crippen Method |
| mcvol | 126.720 | ml/mol | McGowan Method |
| pc | 2805.41 | kPa | Joback Method |
| rinpol | 1002.00 | | NIST Webbook |
| rinpol | 993.00 | | NIST Webbook |
| rinpol | 982.00 | | NIST Webbook |
| rinpol | 984.00 | | NIST Webbook |
| rinpol | 982.00 | | NIST Webbook |
| rinpol | 1002.00 | | NIST Webbook |
| ripol | 1291.00 | | NIST Webbook |
| ripol | 1292.00 | | NIST Webbook |
| ripol | 1295.00 | | NIST Webbook |
| ripol | 1290.00 | | NIST Webbook |
| ripol | 1295.00 | | NIST Webbook |
| ripol | 1291.00 | | NIST Webbook |
| tb | 462.89 | K | Joback Method |
| tc | 646.21 | K | Joback Method |
| tf | 247.00 | K | Joback Method |
| vc | 0.487 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 263.30 | J/mol×K | 462.89 | Joback Method |
| cpg | 317.95 | J/mol×K | 615.66 | Joback Method |
| cpg | 307.96 | J/mol×K | 585.10 | Joback Method |
| cpg | 297.52 | J/mol×K | 554.55 | Joback Method |
| cpg | 286.60 | J/mol×K | 524.00 | Joback Method |
| cpg | 275.19 | J/mol×K | 493.44 | Joback Method |
| cpg | 327.49 | J/mol×K | 646.21 | Joback Method |
| dvisc | 0.0002123 | Pa×s | 462.89 | Joback Method |
| dvisc | 0.0002744 | Pa×s | 426.91 | Joback Method |
| dvisc | 0.0003717 | Pa×s | 390.93 | Joback Method |
| dvisc | 0.0005355 | Pa×s | 354.94 | Joback Method |
| dvisc | 0.0008378 | Pa×s | 318.96 | Joback Method |
| dvisc | 0.0014687 | Pa×s | 282.98 | Joback Method |
| dvisc | 0.0030324 | Pa×s | 247.00 | Joback Method |

# Sources

**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
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C64187833&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
**hfus:** Enthalpy of fusion at standard conditions
**hvap:** Enthalpy of vaporization at standard conditions

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

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