# Succinic acid, ethyl pent-4-en-2-yl ester

**Inchi:** InChI=1S/C11H18O4/c1-4-6-9(3)15-11(13)8-7-10(12)14-5-2/h4,9H,1,5-8H2,2-3H3
**InchiKey:** PFLRZSGVXOTHLU-UHFFFAOYSA-N
**Formula:** C11H18O4
**SMILES:** C=CCC(C)OC(=O)CCC(=O)OCC
**Mol. weight [g/mol]:** 214.26

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -340.70 | kJ/mol | Joback Method |
| hf | -639.82 | kJ/mol | Joback Method |
| hfus | 25.02 | kJ/mol | Joback Method |
| hvap | 57.33 | kJ/mol | Joback Method |
| log10ws | -2.12 | | Crippen Method |
| logp | 1.837 | | Crippen Method |
| mcvol | 176.430 | ml/mol | McGowan Method |
| pc | 2200.01 | kPa | Joback Method |
| rinpol | 1393.00 | | NIST Webbook |
| rinpol | 1393.00 | | NIST Webbook |
| tb | 599.90 | K | Joback Method |
| tc | 784.60 | K | Joback Method |
| tf | 341.29 | K | Joback Method |
| vc | 0.674 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 444.35 | J/mol×K | 599.90 | Joback Method |
| cpg | 506.32 | J/mol×K | 753.82 | Joback Method |
| cpg | 495.15 | J/mol×K | 723.03 | Joback Method |
| cpg | 483.37 | J/mol×K | 692.25 | Joback Method |
| cpg | 470.98 | J/mol×K | 661.47 | Joback Method |
| cpg | 457.97 | J/mol×K | 630.68 | Joback Method |
| cpg | 516.88 | J/mol×K | 784.60 | Joback Method |
| dvisc | 0.0001652 | Pa×s | 599.90 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002153 | Pa×s | 556.80 | Joback Method |
| dvisc | 0.0002935 | Pa×s | 513.70 | Joback Method |
| dvisc | 0.0004234 | Pa×s | 470.60 | Joback Method |
| dvisc | 0.0006577 | Pa×s | 427.49 | Joback Method |
| dvisc | 0.0011277 | Pa×s | 384.39 | Joback Method |
| dvisc | 0.0022154 | Pa×s | 341.29 | 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=U353457&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 |