# Succinic acid, dec-2-yl but-2-en-1-yl ester

**Inchi:** InChI=1S/C18H32O4/c1-4-6-8-9-10-11-12-16(3)22-18(20)14-13-17(19)21-15-7-5-2/h5,7,
**InchiKey:** AIWQZJIMKVSXRH-FNORWQNLSA-N
**Formula:** C18H32O4
**SMILES:** CC=CCOC(=O)CCC(=O)OC(C)CCCCCCCC
**Mol. weight [g/mol]:** 312.44

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -289.38 | kJ/mol | Joback Method |
| hf | -792.51 | kJ/mol | Joback Method |
| hfus | 44.63 | kJ/mol | Joback Method |
| hvap | 73.54 | kJ/mol | Joback Method |
| log10ws | -5.05 | | Crippen Method |
| logp | 4.568 | | Crippen Method |
| mcvol | 275.060 | ml/mol | McGowan Method |
| pc | 1280.99 | kPa | Joback Method |
| rinpol | 2072.00 | | NIST Webbook |
| rinpol | 2072.00 | | NIST Webbook |
| tb | 767.54 | K | Joback Method |
| tc | 951.19 | K | Joback Method |
| tf | 416.86 | K | Joback Method |
| vc | 1.065 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 825.70 | J/mol×K | 767.54 | Joback Method |
| cpg | 901.84 | J/mol×K | 920.58 | Joback Method |
| cpg | 888.37 | J/mol×K | 889.97 | Joback Method |
| cpg | 874.04 | J/mol×K | 859.37 | Joback Method |
| cpg | 858.83 | J/mol×K | 828.76 | Joback Method |
| cpg | 842.72 | J/mol×K | 798.15 | Joback Method |
| cpg | 914.48 | J/mol×K | 951.19 | Joback Method |
| dvisc | 0.0000564 | Pa×s | 767.54 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000758 | Pa×s | 709.09 | Joback Method |
| dvisc | 0.0001075 | Pa×s | 650.65 | Joback Method |
| dvisc | 0.0001633 | Pa×s | 592.20 | Joback Method |
| dvisc | 0.0002719 | Pa×s | 533.75 | Joback Method |
| dvisc | 0.0005130 | Pa×s | 475.31 | Joback Method |
| dvisc | 0.0011565 | Pa×s | 416.86 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U391227&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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# 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 |
| **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 |

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