# Succinic acid, 2-ethylhexyl 2,4-dimethylpent-3-yl ester

**Inchi:** InChI=1S/C19H36O4/c1-7-9-10-16(8-2)13-22-17(20)11-12-18(21)23-19(14(3)4)15(5)6/h1

**InchiKey:** AUVOXXRNZIFSKU-UHFFFAOYSA-N

**Formula:** C19H36O4

**SMILES:** CCCCC(CC)COC(=O)CCC(=O)OC(C(C)C)C(C)C

**Mol. weight [g/mol]:** 328.49

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -368.50 | kJ/mol | Joback Method |
| hf | -946.21 | kJ/mol | Joback Method |
| hfus | 36.45 | kJ/mol | Joback Method |
| hvap | 74.65 | kJ/mol | Joback Method |
| log10ws | -4.89 | | Crippen Method |
| logp | 4.750 | | Crippen Method |
| mcvol | 293.450 | ml/mol | McGowan Method |
| pc | 1174.44 | kPa | Joback Method |
| rinpol | 2024.00 | | NIST Webbook |
| rinpol | 2024.00 | | NIST Webbook |
| tb | 784.94 | K | Joback Method |
| tc | 970.70 | K | Joback Method |
| tf | 388.21 | K | Joback Method |
| vc | 1.123 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 910.84 | J/mol×K | 784.94 | Joback Method |
| cpg | 929.17 | J/mol×K | 815.90 | Joback Method |
| cpg | 946.44 | J/mol×K | 846.86 | Joback Method |
| cpg | 962.66 | J/mol×K | 877.82 | Joback Method |
| cpg | 977.85 | J/mol×K | 908.78 | Joback Method |
| cpg | 992.02 | J/mol×K | 939.74 | Joback Method |
| cpg | 1005.19 | J/mol×K | 970.70 | Joback Method |
| dvisc | 0.0021477 | Pa×s | 388.21 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0007008 | Pa×s | 454.33 | Joback Method |
| dvisc | 0.0003040 | Pa×s | 520.45 | Joback Method |
| dvisc | 0.0001591 | Pa×s | 586.58 | Joback Method |
| dvisc | 0.0000950 | Pa×s | 652.70 | Joback Method |
| dvisc | 0.0000624 | Pa×s | 718.82 | Joback Method |
| dvisc | 0.0000439 | Pa×s | 784.94 | Joback Method |

# Sources

| | |
|---|---|
| **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=U390507&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# 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 |