

# Succinic acid, heptyl 3-hexyl ester

|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| <b>Inchi:</b>               | InChI=1S/C17H32O4/c1-4-7-8-9-10-14-20-16(18)12-13-17(19)21-15(6-3)11-5-2/h15H,4- |
| <b>InchiKey:</b>            | YSQWULIUycnzsr-UHFFFAOYSA-N                                                      |
| <b>Formula:</b>             | C17H32O4                                                                         |
| <b>SMILES:</b>              | CCCCCCCOC(=O)CCC(=O)OC(CC)CCC                                                    |
| <b>Mol. weight [g/mol]:</b> | 300.43                                                                           |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -378.02 | kJ/mol               | Joback Method  |
| hf            | -889.09 | kJ/mol               | Joback Method  |
| hfus          | 41.84   | kJ/mol               | Joback Method  |
| hvap          | 71.36   | kJ/mol               | Joback Method  |
| log10ws       | -4.78   |                      | Crippen Method |
| logp          | 4.402   |                      | Crippen Method |
| mvol          | 265.270 | ml/mol               | McGowan Method |
| pc            | 1322.31 | kPa                  | Joback Method  |
| rinpol        | 1954.00 |                      | NIST Webbook   |
| rinpol        | 1954.00 |                      | NIST Webbook   |
| tb            | 740.50  | K                    | Joback Method  |
| tc            | 919.30  | K                    | Joback Method  |
| tf            | 410.67  | K                    | Joback Method  |
| vc            | 1.030   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 791.52    | J/mol×K | 740.50          | Joback Method |
| cpg           | 808.68    | J/mol×K | 770.30          | Joback Method |
| cpg           | 824.95    | J/mol×K | 800.10          | Joback Method |
| cpg           | 840.35    | J/mol×K | 829.90          | Joback Method |
| cpg           | 854.88    | J/mol×K | 859.70          | Joback Method |
| cpg           | 868.56    | J/mol×K | 889.50          | Joback Method |
| cpg           | 881.39    | J/mol×K | 919.30          | Joback Method |
| dvisc         | 0.0013763 | Paxs    | 410.67          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0006360 | Paxs | 465.64 | Joback Method |
| dvisc | 0.0003459 | Paxs | 520.61 | Joback Method |
| dvisc | 0.0002113 | Paxs | 575.59 | Joback Method |
| dvisc | 0.0001407 | Paxs | 630.56 | Joback Method |
| dvisc | 0.0001000 | Paxs | 685.53 | Joback Method |
| dvisc | 0.0000748 | Paxs | 740.50 | Joback Method |

## Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U349446&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U349446&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |

## Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

Latest version available from:

<https://www.chemeo.com/cid/82-924-5/Succinic-acid-heptyl-3-hexyl-ester.pdf>

Generated by Cheméo on 2024-04-29 00:37:50.729829376 +0000 UTC m=+16640319.650406698.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.