

# Succinic acid, decyl pent-4-enyl ester

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C19H34O4/c1-3-5-7-8-9-10-11-13-17-23-19(21)15-14-18(20)22-16-12-6-4-2/h4

GCTZHRFPDVOCLA-UHFFFAOYSA-N

C19H34O4

C=CCCCOC(=O)CCC(=O)OCCCCCCCCCCC

326.47

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -270.90 | kJ/mol  | Joback Method  |
| hf            | -799.66 | kJ/mol  | Joback Method  |
| hfus          | 49.26   | kJ/mol  | Joback Method  |
| hvap          | 75.53   | kJ/mol  | Joback Method  |
| log10ws       | -5.35   |         | Crippen Method |
| logp          | 4.960   |         | Crippen Method |
| mcvol         | 289.150 | ml/mol  | McGowan Method |
| pc            | 1182.53 | kPa     | Joback Method  |
| rinpol        | 2229.00 |         | NIST Webbook   |
| tb            | 783.38  | K       | Joback Method  |
| tc            | 964.87  | K       | Joback Method  |
| tf            | 446.45  | K       | Joback Method  |
| vc            | 1.129   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 882.52    | J/mol×K | 783.38          | Joback Method |
| cpg           | 899.80    | J/mol×K | 813.63          | Joback Method |
| cpg           | 916.15    | J/mol×K | 843.88          | Joback Method |
| cpg           | 931.56    | J/mol×K | 874.12          | Joback Method |
| cpg           | 946.06    | J/mol×K | 904.37          | Joback Method |
| cpg           | 959.66    | J/mol×K | 934.62          | Joback Method |
| cpg           | 972.38    | J/mol×K | 964.87          | Joback Method |
| dvisc         | 0.0009442 | Pa×s    | 446.45          | Joback Method |
| dvisc         | 0.0004720 | Pa×s    | 502.61          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0002712 | Pa×s | 558.76 | Joback Method |
| dvisc | 0.0001724 | Pa×s | 614.92 | Joback Method |
| dvisc | 0.0001183 | Pa×s | 671.07 | Joback Method |
| dvisc | 0.0000860 | Pa×s | 727.23 | Joback Method |
| dvisc | 0.0000654 | Pa×s | 783.38 | Joback Method |

## Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U353376&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U353376&amp;Units=SI</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                                 |

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