

# Succinic acid, 2,3-dichlorophenyl 2,2-dichloroethyl ester

**Inchi:** InChI=1S/C12H10Cl4O4/c13-7-2-1-3-8(12(7)16)20-11(18)5-4-10(17)19-6-9(14)15/h1-3,9  
**InchiKey:** ZEUZOODZPNSYKF-UHFFFAOYSA-N  
**Formula:** C12H10Cl4O4  
**SMILES:** O=C(CCC(=O)Oc1cccc(Cl)c1Cl)OCC(Cl)Cl  
**Mol. weight [g/mol]:** 360.02

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -374.69 | kJ/mol  | Joback Method  |
| hf            | -635.26 | kJ/mol  | Joback Method  |
| hfus          | 38.94   | kJ/mol  | Joback Method  |
| hvap          | 81.37   | kJ/mol  | Joback Method  |
| log10ws       | -4.61   |         | Crippen Method |
| logp          | 4.026   |         | Crippen Method |
| mcvol         | 220.020 | ml/mol  | McGowan Method |
| pc            | 2231.30 | kPa     | Joback Method  |
| rinpol        | 2443.00 |         | NIST Webbook   |
| rinpol        | 2443.00 |         | NIST Webbook   |
| tb            | 812.46  | K       | Joback Method  |
| tc            | 1040.83 | K       | Joback Method  |
| tf            | 525.46  | K       | Joback Method  |
| vc            | 0.838   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 525.55    | J/mol×K | 812.46          | Joback Method |
| cpg           | 534.82    | J/mol×K | 850.52          | Joback Method |
| cpg           | 543.17    | J/mol×K | 888.58          | Joback Method |
| cpg           | 550.63    | J/mol×K | 926.64          | Joback Method |
| cpg           | 557.19    | J/mol×K | 964.70          | Joback Method |
| cpg           | 562.85    | J/mol×K | 1002.76         | Joback Method |
| cpg           | 567.64    | J/mol×K | 1040.83         | Joback Method |
| dvisc         | 0.0005894 | Pa×s    | 525.46          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0003760 | Pa×s | 573.29 | Joback Method |
| dvisc | 0.0002571 | Pa×s | 621.13 | Joback Method |
| dvisc | 0.0001856 | Pa×s | 668.96 | Joback Method |
| dvisc | 0.0001399 | Pa×s | 716.79 | Joback Method |
| dvisc | 0.0001093 | Pa×s | 764.63 | Joback Method |
| dvisc | 0.0000879 | Pa×s | 812.46 | 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.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>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U390525&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U390525&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                                 |

Latest version available from:

<https://www.chemeo.com/cid/91-341-2/Succinic-acid-2-3-dichlorophenyl-2-2-dichloroethyl-ester.pdf>

Generated by Cheméo on 2025-12-05 11:04:21.328802549 +0000 UTC m=+4680858.858843203.

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