# Succinic acid, 2,4-dichlorophenethyl octyl ester

**Inchi:** InChI=1S/C20H28Cl2O4/c1-2-3-4-5-6-7-13-25-19(23)10-11-20(24)26-14-12-16-8-9-17(21

**InchiKey:** JOGSHMYVBCMRPG-UHFFFAOYSA-N

**Formula:** C20H28Cl2O4

**SMILES:** CCCCCCCCOC(=O)CCC(=O)OCCc1ccc(Cl)cc1Cl

**Mol. weight [g/mol]:** 403.34

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -281.03 | kJ/mol | Joback Method |
| hf | -763.62 | kJ/mol | Joback Method |
| hfus | 54.79 | kJ/mol | Joback Method |
| hvap | 90.80 | kJ/mol | Joback Method |
| log10ws | -6.39 | | Crippen Method |
| logp | 5.763 | | Crippen Method |
| mcvol | 308.260 | ml/mol | McGowan Method |
| pc | 1258.37 | kPa | Joback Method |
| rinpol | 2783.00 | | NIST Webbook |
| rinpol | 2783.00 | | NIST Webbook |
| tb | 921.08 | K | Joback Method |
| tc | 1133.06 | K | Joback Method |
| tf | 570.78 | K | Joback Method |
| vc | 1.194 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 929.13 | J/mol×K | 921.08 | Joback Method |
| cpg | 942.84 | J/mol×K | 956.41 | Joback Method |
| cpg | 955.36 | J/mol×K | 991.74 | Joback Method |
| cpg | 966.72 | J/mol×K | 1027.07 | Joback Method |
| cpg | 976.94 | J/mol×K | 1062.40 | Joback Method |
| cpg | 986.04 | J/mol×K | 1097.73 | Joback Method |
| cpg | 994.05 | J/mol×K | 1133.06 | Joback Method |
| dvisc | 0.0003466 | Pa×s | 570.78 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002059 | Pa×s | 629.16 | Joback Method |
| dvisc | 0.0001336 | Pa×s | 687.55 | Joback Method |
| dvisc | 0.0000928 | Pa×s | 745.93 | Joback Method |
| dvisc | 0.0000679 | Pa×s | 804.31 | Joback Method |
| dvisc | 0.0000519 | Pa×s | 862.70 | Joback Method |
| dvisc | 0.0000410 | Pa×s | 921.08 | Joback Method |

# Sources

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|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U381593&Units=SI |

# 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 |