# Succinic acid, 2-fluorophenyl 10-chlorodecyl ester

**Inchi:** InChI=1S/C20H28ClFO4/c21-15-9-5-3-1-2-4-6-10-16-25-19(23)13-14-20(24)26-18-12-8-7

**InchiKey:** ASLKPPOKKMMECG-UHFFFAOYSA-N

**Formula:** C20H28ClFO4

**SMILES:** O=C(CCC(=O)Oc1ccccc1F)OCCCCCCCCCCCCl

**Mol. weight [g/mol]:** 386.88

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -454.28 | kJ/mol | Joback Method |
| hf | -932.52 | kJ/mol | Joback Method |
| hfus | 54.06 | kJ/mol | Joback Method |
| hvap | 84.93 | kJ/mol | Joback Method |
| log10ws | -6.16 | | Crippen Method |
| logp | 5.414 | | Crippen Method |
| mcvol | 297.790 | ml/mol | McGowan Method |
| pc | 1264.65 | kPa | Joback Method |
| rinpol | 2798.00 | | NIST Webbook |
| rinpol | 2798.00 | | NIST Webbook |
| tb | 877.94 | K | Joback Method |
| tc | 1080.11 | K | Joback Method |
| tf | 528.93 | K | Joback Method |
| vc | 1.163 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 912.21 | J/mol×K | 877.94 | Joback Method |
| cpg | 926.84 | J/mol×K | 911.63 | Joback Method |
| cpg | 940.35 | J/mol×K | 945.33 | Joback Method |
| cpg | 952.77 | J/mol×K | 979.02 | Joback Method |
| cpg | 964.12 | J/mol×K | 1012.72 | Joback Method |
| cpg | 974.43 | J/mol×K | 1046.41 | Joback Method |
| cpg | 983.73 | J/mol×K | 1080.11 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U390411&Units=SI |
| **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 |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **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 |