# Succinic acid, 2-fluorophenyl 4-biphenyl ester

**Inchi:** InChI=1S/C22H17FO4/c23-19-8-4-5-9-20(19)27-22(25)15-14-21(24)26-18-12-10-17(11-1
**InchiKey:** ZORJSRRIXHMJFC-UHFFFAOYSA-N
**Formula:** C22H17FO4
**SMILES:** O=C(CCC(=O)Oc1ccccc1F)Oc1ccc(-c2ccccc2)cc1
**Mol. weight [g/mol]:** 364.37

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -210.32 | kJ/mol | Joback Method |
| hf | -496.47 | kJ/mol | Joback Method |
| hfus | 42.73 | kJ/mol | Joback Method |
| hvap | 90.21 | kJ/mol | Joback Method |
| log10ws | -6.68 | | Crippen Method |
| logp | 4.784 | | Crippen Method |
| mcvol | 266.210 | ml/mol | McGowan Method |
| pc | 1857.91 | kPa | Joback Method |
| rinpol | 3089.00 | | NIST Webbook |
| rinpol | 3089.00 | | NIST Webbook |
| tb | 944.61 | K | Joback Method |
| tc | 1187.41 | K | Joback Method |
| tf | 586.91 | K | Joback Method |
| vc | 1.010 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 799.38 | J/mol×K | 944.61 | Joback Method |
| cpg | 810.89 | J/mol×K | 985.08 | Joback Method |
| cpg | 821.00 | J/mol×K | 1025.54 | Joback Method |
| cpg | 829.75 | J/mol×K | 1066.01 | Joback Method |
| cpg | 837.22 | J/mol×K | 1106.48 | Joback Method |
| cpg | 843.46 | J/mol×K | 1146.95 | Joback Method |
| cpg | 848.54 | J/mol×K | 1187.41 | Joback Method |

# Sources

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|---|---|
| **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=U390086&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |