

# BENZOIC ACID, 2-FLUORO-, 4-BIPHENYLYL ESTER

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Other names:         | 2-Fluorobenzoic acid, 4-biphenyl ester                                           |
| Inchi:               | InChI=1S/C19H13FO2/c20-18-9-5-4-8-17(18)19(21)22-16-12-10-15(11-13-16)14-6-2-1-3 |
| InchiKey:            | MJUWGKGNELOGFC-UHFFFAOYSA-N                                                      |
| Formula:             | C19H13FO2                                                                        |
| SMILES:              | O=C(Oc1ccc(-c2ccccc2)cc1)c1ccccc1F                                               |
| Mol. weight [g/mol]: | 292.31                                                                           |

## Physical Properties

| Property code | Value   | Unit   | Source             |
|---------------|---------|--------|--------------------|
| hf            | -259.28 | kJ/mol | Cheméo Relay (1.0) |
| hfus          | 32.18   | kJ/mol | Joback Method      |
| ie            | 8.21    | eV     | Cheméo Relay (1.0) |
| log10ws       | -5.94   |        | Cheméo Relay (1.0) |
| logp          | 4.712   |        | Crippen Method     |
| mcvol         | 216.500 | ml/mol | McGowan Method     |
| rinpol        | 2593.00 |        | NIST Webbook       |
| rinpol        | 2593.00 |        | NIST Webbook       |
| tb            | 664.14  | K      | Cheméo Relay (1.0) |
| tf            | 379.51  | K      | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 596.32 | J/mol×K | 799.68          | Joback Method |
| cpg           | 610.61 | J/mol×K | 841.79          | Joback Method |
| cpg           | 623.49 | J/mol×K | 883.89          | Joback Method |
| cpg           | 635.07 | J/mol×K | 926.00          | Joback Method |
| cpg           | 645.42 | J/mol×K | 968.10          | Joback Method |
| cpg           | 654.62 | J/mol×K | 1010.21         | Joback Method |
| cpg           | 662.76 | J/mol×K | 1052.32         | Joback Method |

# Sources

Cheméo Relay (1.0, beta):

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C300405861&Units=SI>

Joback Method: [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

McGowan Method: <http://link.springer.com/article/10.1007/BF02311772>

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method: [https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

Cheméo Relay (1.0):

## Legend

|                 |                                              |
|-----------------|----------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                      |
| <b>hf:</b>      | Enthalpy of formation at standard conditions |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions    |
| <b>ie:</b>      | Ionization energy                            |
| <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>rinpola:</b> | Non-polar retention indices                  |
| <b>tb:</b>      | Normal Boiling Point Temperature             |
| <b>tf:</b>      | Normal melting (fusion) point                |

Latest version available from:

<https://www.chemeo.com/cid/24-725-0/BENZOIC-ACID-2-FLUORO-4-BIPHENYLYL-ESTER.pdf>

Generated by Cheméo on 2026-07-22 00:16:47.2205702 +0000 UTC m=+190503.062455599.

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