

# 2-Fluorothiophenol

|                      |                                            |
|----------------------|--------------------------------------------|
| Inchi:               | InChI=1S/C6H5FS/c7-5-3-1-2-4-6(5)8/h1-4,8H |
| InchiKey:            | WJTZZPVVTSDNJJ-UHFFFAOYSA-N                |
| Formula:             | C6H5FS                                     |
| SMILES:              | Fc1ccccc1S                                 |
| Mol. weight [g/mol]: | 128.17                                     |

## Physical Properties

| Property code | Value   | Unit   | Source             |
|---------------|---------|--------|--------------------|
| hf            | -116.78 | kJ/mol | Cheméo Relay (1.0) |
| hfus          | 12.07   | kJ/mol | Joback Method      |
| hvap          | 49.46   | kJ/mol | Cheméo Relay (1.0) |
| ie            | 8.55    | eV     | Cheméo Relay (1.0) |
| log10ws       | -1.97   |        | Cheméo Relay (1.0) |
| logp          | 2.114   |        | Crippen Method     |
| mcvol         | 89.760  | ml/mol | McGowan Method     |
| tb            | 428.06  | K      | Cheméo Relay (1.0) |
| tc            | 667.14  | K      | Cheméo Relay (1.0) |
| tf            | 241.54  | K      | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 152.19 | J/mol×K | 430.47          | Joback Method |
| cpg           | 161.54 | J/mol×K | 468.89          | Joback Method |
| cpg           | 170.29 | J/mol×K | 507.31          | Joback Method |
| cpg           | 178.46 | J/mol×K | 545.74          | Joback Method |
| cpg           | 186.08 | J/mol×K | 584.16          | Joback Method |
| cpg           | 193.16 | J/mol×K | 622.58          | Joback Method |
| cpg           | 199.74 | J/mol×K | 661.00          | Joback Method |

# Sources

Cheméo Relay (1.0, beta):

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C2557780&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>hvap:</b>    | Enthalpy of vaporization 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>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |

Latest version available from:

<https://www.chemeo.com/cid/92-421-2/2-Fluorothiophenol.pdf>

Generated by Cheméo on 2026-07-21 22:32:45.105190105 +0000 UTC m=+184260.947075513.

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