

# 4-Fluorobenzoic acid, 3-methylbut-2-enyl ester

|                      |                                                                            |
|----------------------|----------------------------------------------------------------------------|
| Inchi:               | InChI=1S/C12H13FO2/c1-9(2)7-8-15-12(14)10-3-5-11(13)6-4-10/h3-7H,8H2,1-2H3 |
| InchiKey:            | AAPZRXZXNLP-PP-UHFFFAOYSA-N                                                |
| Formula:             | C12H13FO2                                                                  |
| SMILES:              | CC(C)=CCOC(=O)c1ccc(F)cc1                                                  |
| Mol. weight [g/mol]: | 208.23                                                                     |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -204.12 | kJ/mol  | Joback Method  |
| hf            | -399.43 | kJ/mol  | Joback Method  |
| hfus          | 25.25   | kJ/mol  | Joback Method  |
| hvap          | 53.62   | kJ/mol  | Joback Method  |
| log10ws       | -3.57   |         | Crippen Method |
| logp          | 2.949   |         | Crippen Method |
| mcvol         | 161.090 | ml/mol  | McGowan Method |
| pc            | 2510.03 | kPa     | Joback Method  |
| rinpol        | 1438.00 |         | NIST Webbook   |
| rinpol        | 1438.00 |         | NIST Webbook   |
| tb            | 585.22  | K       | Joback Method  |
| tc            | 794.67  | K       | Joback Method  |
| tf            | 317.65  | K       | Joback Method  |
| vc            | 0.623   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 381.89 | J/mol×K | 585.22          | Joback Method |
| cpg           | 395.78 | J/mol×K | 620.13          | Joback Method |
| cpg           | 408.85 | J/mol×K | 655.04          | Joback Method |
| cpg           | 421.14 | J/mol×K | 689.94          | Joback Method |
| cpg           | 432.66 | J/mol×K | 724.85          | Joback Method |
| cpg           | 443.46 | J/mol×K | 759.76          | Joback Method |
| cpg           | 453.56 | J/mol×K | 794.67          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U299151&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U299151&amp;Units=SI</a> |

# Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <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>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rlnpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

Latest version available from:

<https://www.chemeo.com/cid/85-661-4/4-Fluorobenzoic-acid-3-methylbut-2-enyl-ester.pdf>

Generated by Cheméo on 2025-12-05 17:05:47.191160071 +0000 UTC m=+4702544.721200726.

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