

# Glutaric acid, 3-fluorophenyl isobutyl ester

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C15H19FO4/c1-11(2)10-19-14(17)7-4-8-15(18)20-13-6-3-5-12(16)9-13/h3,5-6,

PQBJHEZZUZKHTF-UHFFFAOYSA-N

C15H19FO4

CC(C)COC(=O)CCCC(=O)Oc1cccc(F)c1

282.31

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -486.89 | kJ/mol  | Joback Method  |
| hf            | -818.86 | kJ/mol  | Joback Method  |
| hfus          | 33.39   | kJ/mol  | Joback Method  |
| hvap          | 69.03   | kJ/mol  | Joback Method  |
| log10ws       | -3.67   |         | Crippen Method |
| logp          | 3.101   |         | Crippen Method |
| mcvol         | 215.100 | ml/mol  | McGowan Method |
| pc            | 1911.91 | kPa     | Joback Method  |
| rinpol        | 1937.00 |         | NIST Webbook   |
| tb            | 725.67  | K       | Joback Method  |
| tc            | 925.21  | K       | Joback Method  |
| tf            | 427.66  | K       | Joback Method  |
| vc            | 0.828   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 601.99 | J/mol×K | 725.67          | Joback Method |
| cpg           | 616.42 | J/mol×K | 758.93          | Joback Method |
| cpg           | 629.93 | J/mol×K | 792.18          | Joback Method |
| cpg           | 642.53 | J/mol×K | 825.44          | Joback Method |
| cpg           | 654.25 | J/mol×K | 858.69          | Joback Method |
| cpg           | 665.08 | J/mol×K | 891.95          | Joback Method |
| cpg           | 675.03 | J/mol×K | 925.21          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</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=U359047&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U359047&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>hvac:</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>rinpol:</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/53-983-2/Glutaric-acid-3-fluorophenyl-isobutyl-ester.pdf>

Generated by Cheméo on 2025-12-05 12:54:40.085630501 +0000 UTC m=+4687477.615671159.

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