

# Glutaric acid, hept-2-yl 2-bromo-4-fluorophenyl ester

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C18H24BrFO4/c1-3-4-5-7-13(2)23-17(21)8-6-9-18(22)24-16-11-10-14(20)12-1 |
| <b>InchiKey:</b>            | FUHVWNGEWUOYOY-UHFFFAOYSA-N  |
| <b>Formula:</b>             | C18H24BrFO4  |
| <b>SMILES:</b>              | CCCCC(C)OC(=O)CCCC(=O)Oc1ccc(F)cc1Br   |
| <b>Mol. weight [g/mol]:</b> | 403.28   |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -456.94 | kJ/mol               | Joback Method  |
| hf            | -865.92 | kJ/mol               | Joback Method  |
| hfus          | 46.05   | kJ/mol               | Joback Method  |
| hvap          | 82.80   | kJ/mol               | Joback Method  |
| log10ws       | -6.44   |                      | Crippen Method |
| logp          | 5.176   |                      | Crippen Method |
| mvol          | 274.870 | ml/mol               | McGowan Method |
| pc            | 1573.45 | kPa                  | Joback Method  |
| rinpol        | 2357.00 |                      | NIST Webbook   |
| rinpol        | 2357.00 |                      | NIST Webbook   |
| tb            | 865.45  | K                    | Joback Method  |
| tc            | 1073.80 | K                    | Joback Method  |
| tf            | 533.79  | K                    | Joback Method  |
| vc            | 1.058   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 808.10 | J/mol×K | 865.45          | Joback Method |
| cpg           | 821.73 | J/mol×K | 900.18          | Joback Method |
| cpg           | 834.30 | J/mol×K | 934.90          | Joback Method |
| cpg           | 845.83 | J/mol×K | 969.63          | Joback Method |
| cpg           | 856.34 | J/mol×K | 1004.35         | Joback Method |
| cpg           | 865.86 | J/mol×K | 1039.08         | Joback Method |
| cpg           | 874.40 | J/mol×K | 1073.80         | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <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=U389774&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U389774&amp;Units=SI</a> |
| <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>                                 |

# 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>hvp:</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>rinp:</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/115-718-7/Glutaric-acid-hept-2-yl-2-bromo-4-fluorophenyl-ester.pdf>

Generated by Cheméo on 2024-04-27 20:37:21.159384959 +0000 UTC m=+16539490.079962271.

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