

# Glutaric acid, cyclopentyl 2-chloro-6-fluorophenyl ester

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C16H18ClFO4/c17-12-7-3-8-13(18)16(12)22-15(20)10-4-9-14(19)21-11-5-1-2- |
| <b>InchiKey:</b>            | ZCQMHHJPJQABIR-UHFFFAOYSA-N  |
| <b>Formula:</b>             | C16H18ClFO4  |
| <b>SMILES:</b>              | O=C(CCCC(=O)OC1CCCC1)Oc1c(F)cccc1Cl  |
| <b>Mol. weight [g/mol]:</b> | 328.76   |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -461.04 | kJ/mol               | Joback Method  |
| hf            | -800.95 | kJ/mol               | Joback Method  |
| hfus          | 37.24   | kJ/mol               | Joback Method  |
| hvap          | 76.95   | kJ/mol               | Joback Method  |
| log10ws       | -5.02   |                      | Crippen Method |
| logp          | 4.041   |                      | Crippen Method |
| mvol          | 230.570 | ml/mol               | McGowan Method |
| pc            | 1952.68 | kPa                  | Joback Method  |
| rinpol        | 2253.00 |                      | NIST Webbook   |
| rinpol        | 2253.00 |                      | NIST Webbook   |
| tb            | 806.68  | K                    | Joback Method  |
| tc            | 1026.03 | K                    | Joback Method  |
| tf            | 507.27  | K                    | Joback Method  |
| vc            | 0.879   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 671.61 | J/mol×K | 806.68          | Joback Method |
| cpg           | 685.86 | J/mol×K | 843.24          | Joback Method |
| cpg           | 698.93 | J/mol×K | 879.80          | Joback Method |
| cpg           | 710.84 | J/mol×K | 916.35          | Joback Method |
| cpg           | 721.61 | J/mol×K | 952.91          | Joback Method |
| cpg           | 731.27 | J/mol×K | 989.47          | Joback Method |
| cpg           | 739.85 | J/mol×K | 1026.03         | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <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=U405396&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405396&amp;Units=SI</a> |
| <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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>                                     |

# 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>h vap:</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>r in pol:</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                                 |

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