

# Glutaric acid, 2,5-dichlorophenyl hexyl ester

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C17H22Cl2O4/c1-2-3-4-5-11-22-16(20)7-6-8-17(21)23-15-12-13(18)9-10-14(19) |
| <b>InchiKey:</b>            | BRYMSZROPPNAJJ-UHFFFAOYSA-N  |
| <b>Formula:</b>             | C17H22Cl2O4  |
| <b>SMILES:</b>              | CCCCCOC(=O)CCCC(=O)Oc1cc(Cl)ccc1Cl   |
| <b>Mol. weight [g/mol]:</b> | 361.26   |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -306.29 | kJ/mol               | Joback Method  |
| hf            | -701.70 | kJ/mol               | Joback Method  |
| hfus          | 47.02   | kJ/mol               | Joback Method  |
| hvap          | 84.12   | kJ/mol               | Joback Method  |
| log10ws       | -5.79   |                      | Crippen Method |
| logp          | 5.193   |                      | Crippen Method |
| mvol          | 265.990 | ml/mol               | McGowan Method |
| pc            | 1561.05 | kPa                  | Joback Method  |
| rinpol        | 2532.00 |                      | NIST Webbook   |
| tb            | 852.44  | K                    | Joback Method  |
| tc            | 1062.07 | K                    | Joback Method  |
| tf            | 536.97  | K                    | Joback Method  |
| vc            | 1.026   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 755.26    | J/molxK | 852.44          | Joback Method |
| cpg           | 768.31    | J/molxK | 887.38          | Joback Method |
| cpg           | 780.32    | J/molxK | 922.32          | Joback Method |
| cpg           | 791.29    | J/molxK | 957.25          | Joback Method |
| cpg           | 801.26    | J/molxK | 992.19          | Joback Method |
| cpg           | 810.22    | J/molxK | 1027.13         | Joback Method |
| cpg           | 818.20    | J/molxK | 1062.07         | Joback Method |
| dvisc         | 0.0004746 | Paxs    | 536.97          | Joback Method |
| dvisc         | 0.0002921 | Paxs    | 589.55          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0001947 | Paxs | 642.13 | Joback Method |
| dvisc | 0.0001380 | Paxs | 694.70 | Joback Method |
| dvisc | 0.0001026 | Paxs | 747.28 | Joback Method |
| dvisc | 0.0000794 | Paxs | 799.86 | Joback Method |
| dvisc | 0.0000634 | Paxs | 852.44 | 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=U358998&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U358998&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>                                 |
| <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>                                     |

## Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <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>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                                 |

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