

# Glutaric acid, 2,4,6-trichlorophenyl 4-chlorobenzyl ester

|                      |  |
|----------------------|--|
| Inchi:               | InChI=1S/C18H14Cl4O4/c19-12-6-4-11(5-7-12)10-25-16(23)2-1-3-17(24)26-18-14(21)8- |
| InchiKey:            | RODPXDOWDOTINO-UHFFFAOYSA-N  |
| Formula:             | C18H14Cl4O4  |
| SMILES:              | O=C(CCCC(=O)Oc1c(Cl)cc(Cl)cc1Cl)OCc1ccc(Cl)cc1                                   |
| Mol. weight [g/mol]: | 436.11   |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -228.58 | kJ/mol  | Joback Method  |
| hf            | -540.23 | kJ/mol  | Joback Method  |
| hfus          | 51.26   | kJ/mol  | Joback Method  |
| hvap          | 98.71   | kJ/mol  | Joback Method  |
| log10ws       | -7.17   |         | Crippen Method |
| logp          | 6.119   |         | Crippen Method |
| mcvol         | 280.800 | ml/mol  | McGowan Method |
| pc            | 1736.11 | kPa     | Joback Method  |
| rinpol        | 3098.00 |         | NIST Webbook   |
| rinpol        | 3098.00 |         | NIST Webbook   |
| tb            | 986.82  | K       | Joback Method  |
| tc            | 1229.94 | K       | Joback Method  |
| tf            | 659.54  | K       | Joback Method  |
| vc            | 1.071   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 744.08    | J/molxK | 986.82          | Joback Method |
| cpg           | 772.80    | J/molxK | 1189.42         | Joback Method |
| cpg           | 769.44    | J/molxK | 1148.90         | Joback Method |
| cpg           | 764.91    | J/molxK | 1108.38         | Joback Method |
| cpg           | 759.19    | J/molxK | 1067.86         | Joback Method |
| cpg           | 752.26    | J/molxK | 1027.34         | Joback Method |
| cpg           | 775.01    | J/molxK | 1229.94         | Joback Method |
| dvisc         | 0.0000430 | Paxs    | 986.82          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000522 | Paxs | 932.27 | Joback Method |
| dvisc | 0.0000650 | Paxs | 877.73 | Joback Method |
| dvisc | 0.0000833 | Paxs | 823.18 | Joback Method |
| dvisc | 0.0001107 | Paxs | 768.63 | Joback Method |
| dvisc | 0.0001534 | Paxs | 714.09 | Joback Method |
| dvisc | 0.0002246 | Paxs | 659.54 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U391735&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U391735&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>                     |

## 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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