

# Glutaric acid, 2,6-dimethoxyphenyl nonyl ester

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C22H34O6/c1-4-5-6-7-8-9-10-17-27-20(23)15-12-16-21(24)28-22-18(25-2)13- |
| <b>InchiKey:</b>            | QYXRAEYHYBZLEA-UHFFFAOYSA-N  |
| <b>Formula:</b>             | C22H34O6   |
| <b>SMILES:</b>              | CCCCCCCCCOC(=O)CCCC(=O)Oc1c(OC)cccc1OC   |
| <b>Mol. weight [g/mol]:</b> | 394.50   |

## Physical Properties

| Property code | Value    | Unit                 | Source         |
|---------------|----------|----------------------|----------------|
| gf            | -450.33  | kJ/mol               | Joback Method  |
| hf            | -1037.86 | kJ/mol               | Joback Method  |
| hfus          | 53.95    | kJ/mol               | Joback Method  |
| hvap          | 91.30    | kJ/mol               | Joback Method  |
| log10ws       | -5.91    |                      | Crippen Method |
| logp          | 5.073    |                      | Crippen Method |
| mvol          | 323.700  | ml/mol               | McGowan Method |
| pc            | 1132.91  | kPa                  | Joback Method  |
| rinpol        | 2903.00  |                      | NIST Webbook   |
| rinpol        | 2903.00  |                      | NIST Webbook   |
| tb            | 936.82   | K                    | Joback Method  |
| tc            | 1147.59  | K                    | Joback Method  |
| tf            | 577.94   | K                    | Joback Method  |
| vc            | 1.244    | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 1055.48   | J/molxK | 936.82          | Joback Method |
| cpg           | 1070.70   | J/molxK | 971.95          | Joback Method |
| cpg           | 1084.40   | J/molxK | 1007.08         | Joback Method |
| cpg           | 1096.55   | J/molxK | 1042.20         | Joback Method |
| cpg           | 1107.18   | J/molxK | 1077.33         | Joback Method |
| cpg           | 1116.26   | J/molxK | 1112.46         | Joback Method |
| cpg           | 1123.79   | J/molxK | 1147.59         | Joback Method |
| dvisc         | 0.0002064 | Paxs    | 577.94          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0001210 | Paxs | 637.75 | Joback Method |
| dvisc | 0.0000777 | Paxs | 697.57 | Joback Method |
| dvisc | 0.0000535 | Paxs | 757.38 | Joback Method |
| dvisc | 0.0000389 | Paxs | 817.19 | Joback Method |
| dvisc | 0.0000296 | Paxs | 877.01 | Joback Method |
| dvisc | 0.0000233 | Paxs | 936.82 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <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=U358712&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U358712&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |

## Legend

|                            |   |
|----------------------------|---|
| <b>cp<sub>g</sub>:</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>log<sub>10</sub>ws:</b> | Log <sub>10</sub> of Water solubility in mol/l  |
| <b>logp:</b>               | Octanol/Water partition coefficient             |
| <b>m<sub>cvol</sub>:</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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