

# Glutaric acid, 4-bromobenzyl 2-methylhex-3-yl ester

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Inchi:               | InChI=1S/C19H27BrO4/c1-4-6-17(14(2)3)24-19(22)8-5-7-18(21)23-13-15-9-11-16(20)12 |
| InchiKey:            | FNFGIJNNEVECPP-UHFFFAOYSA-N                                                      |
| Formula:             | C19H27BrO4                                                                       |
| SMILES:              | CCCC(OC(=O)CCCC(=O)OCc1ccc(Br)cc1)C(C)C                                          |
| Mol. weight [g/mol]: | 399.32                                                                           |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -246.52 | kJ/mol  | Joback Method  |
| hf            | -684.26 | kJ/mol  | Joback Method  |
| hfus          | 42.43   | kJ/mol  | Joback Method  |
| hvap          | 84.80   | kJ/mol  | Joback Method  |
| log10ws       | -6.13   |         | Crippen Method |
| logp          | 5.030   |         | Crippen Method |
| mcvol         | 287.190 | ml/mol  | McGowan Method |
| pc            | 1539.08 | kPa     | Joback Method  |
| rinpol        | 2744.00 |         | NIST Webbook   |
| rinpol        | 2744.00 |         | NIST Webbook   |
| tb            | 883.64  | K       | Joback Method  |
| tc            | 1098.00 | K       | Joback Method  |
| tf            | 516.95  | K       | Joback Method  |
| vc            | 1.089   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 860.39    | J/mol×K | 883.64          | Joback Method |
| cpg           | 874.83    | J/mol×K | 919.37          | Joback Method |
| cpg           | 888.10    | J/mol×K | 955.09          | Joback Method |
| cpg           | 900.24    | J/mol×K | 990.82          | Joback Method |
| cpg           | 911.27    | J/mol×K | 1026.55         | Joback Method |
| cpg           | 921.22    | J/mol×K | 1062.27         | Joback Method |
| cpg           | 930.14    | J/mol×K | 1098.00         | Joback Method |
| dvisc         | 0.0005344 | Pa×s    | 516.95          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0002789 | Pa×s | 578.07 | Joback Method |
| dvisc | 0.0001649 | Pa×s | 639.18 | Joback Method |
| dvisc | 0.0001068 | Pa×s | 700.30 | Joback Method |
| dvisc | 0.0000742 | Pa×s | 761.41 | Joback Method |
| dvisc | 0.0000544 | Pa×s | 822.52 | Joback Method |
| dvisc | 0.0000417 | Pa×s | 883.64 | 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=U377533&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U377533&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>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                                 |

Latest version available from:

<https://www.chemeo.com/cid/31-241-9/Glutaric-acid-4-bromobenzyl-2-methylhex-3-yl-ester.pdf>

Generated by Cheméo on 2025-12-05 18:28:27.090854957 +0000 UTC m=+4707504.620895610.

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