# Glutaric acid, 2-methylpent-3-yl 2,4,4-trimethylpentyl ester

**Inchi:** InChI=1S/C19H36O4/c1-8-16(14(2)3)23-18(21)11-9-10-17(20)22-13-15(4)12-19(5,6)7/h1

**InchiKey:** ILRWHECZETUXMO-UHFFFAOYSA-N

**Formula:** C19H36O4

**SMILES:** CCC(OC(=O)CCCC(=O)OCC(C)CC(C)(C)C)C(C)C

**Mol. weight [g/mol]:** 328.49

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -363.22 | kJ/mol | Joback Method |
| hf | -949.68 | kJ/mol | Joback Method |
| hfus | 32.56 | kJ/mol | Joback Method |
| hvap | 73.74 | kJ/mol | Joback Method |
| log10ws | -4.89 | | Crippen Method |
| logp | 4.750 | | Crippen Method |
| mcvol | 293.450 | ml/mol | McGowan Method |
| pc | 1183.34 | kPa | Joback Method |
| rinpol | 1969.00 | | NIST Webbook |
| rinpol | 1969.00 | | NIST Webbook |
| tb | 782.15 | K | Joback Method |
| tc | 970.65 | K | Joback Method |
| tf | 405.63 | K | Joback Method |
| vc | 1.119 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 911.64 | J/mol×K | 782.15 | Joback Method |
| cpg | 992.90 | J/mol×K | 939.23 | Joback Method |
| cpg | 978.69 | J/mol×K | 907.82 | Joback Method |
| cpg | 963.49 | J/mol×K | 876.40 | Joback Method |
| cpg | 947.26 | J/mol×K | 844.98 | Joback Method |
| cpg | 929.99 | J/mol×K | 813.57 | Joback Method |
| cpg | 1006.14 | J/mol×K | 970.65 | Joback Method |
| dvisc | 0.0000387 | Pa×s | 782.15 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0000552 | Pa×s | 719.40 | Joback Method |
| dvisc | 0.0000844 | Pa×s | 656.64 | Joback Method |
| dvisc | 0.0001410 | Pa×s | 593.89 | Joback Method |
| dvisc | 0.0002659 | Pa×s | 531.14 | Joback Method |
| dvisc | 0.0005945 | Pa×s | 468.38 | Joback Method |
| dvisc | 0.0017052 | Pa×s | 405.63 | Joback Method |

# Sources

| | |
|---|---|
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U391527&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |