# Glutaric acid, monoamide, N-(2-phenylpropyl)-, nonyl ester

**Inchi:** InChI=1S/C23H37NO3/c1-3-4-5-6-7-8-12-18-27-23(26)17-13-16-22(25)24-19-20(2)21-14

**InchiKey:** AUESILGLMIGICQ-UHFFFAOYSA-N

**Formula:** C23H37NO3

**SMILES:** CCCCCCCCCOC(=O)CCCC(=O)NCC(C)c1ccccc1

**Mol. weight [g/mol]:** 375.54

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -20.70 | kJ/mol | Joback Method |
| hf | -590.71 | kJ/mol | Joback Method |
| hfus | 55.33 | kJ/mol | Joback Method |
| hvap | 91.02 | kJ/mol | Joback Method |
| log10ws | -6.34 | | Crippen Method |
| logp | 5.370 | | Crippen Method |
| mcvol | 330.160 | ml/mol | McGowan Method |
| pc | 1137.50 | kPa | Joback Method |
| rinpol | 2938.00 | | NIST Webbook |
| tb | 932.21 | K | Joback Method |
| tc | 1142.86 | K | Joback Method |
| tf | 535.14 | K | Joback Method |
| vc | 1.274 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1090.30 | J/mol×K | 932.21 | Joback Method |
| cpg | 1106.97 | J/mol×K | 967.32 | Joback Method |
| cpg | 1122.39 | J/mol×K | 1002.43 | Joback Method |
| cpg | 1136.61 | J/mol×K | 1037.53 | Joback Method |
| cpg | 1149.69 | J/mol×K | 1072.64 | Joback Method |
| cpg | 1161.70 | J/mol×K | 1107.75 | Joback Method |
| cpg | 1172.69 | J/mol×K | 1142.86 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U360827&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **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 |