

Glutaric acid, butyl 4-cyanophenyl ester

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| Inchi: | InChI=1S/C16H19NO4/c1-2-3-11-20-15(18)5-4-6-16(19)21-14-9-7-13(12-17)8-10-14/h7- |
| InchiKey: | YARCBKWABQXNIG-UHFFFAOYSA-N |
| Formula: | C16H19NO4 |
| SMILES: | CCCCOC(=O)CCCC(=O)Oc1ccc(C#N)cc1 |
| Mol. weight [g/mol]: | 289.33 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -148.04 | kJ/mol | Joback Method |
| hf | -473.23 | kJ/mol | Joback Method |
| hfus | 37.93 | kJ/mol | Joback Method |
| hvap | 82.94 | kJ/mol | Joback Method |
| log10ws | -3.93 | | Crippen Method |
| logp | 2.977 | | Crippen Method |
| mcvol | 228.800 | ml/mol | McGowan Method |
| pc | 1778.84 | kPa | Joback Method |
| rinpol | 2347.00 | | NIST Webbook |
| tb | 851.80 | K | Joback Method |
| tc | 1066.43 | K | Joback Method |
| tf | 518.33 | K | Joback Method |
| vc | 0.897 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 671.42 | J/mol×K | 851.80 | Joback Method |
| cpg | 683.46 | J/mol×K | 887.57 | Joback Method |
| cpg | 694.48 | J/mol×K | 923.34 | Joback Method |
| cpg | 704.50 | J/mol×K | 959.11 | Joback Method |
| cpg | 713.53 | J/mol×K | 994.88 | Joback Method |
| cpg | 721.57 | J/mol×K | 1030.65 | Joback Method |
| cpg | 728.64 | J/mol×K | 1066.43 | 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=U358612&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 |
| gf: | Standard Gibbs free energy of formation |
| hf: | Enthalpy of formation at standard conditions |
| hfus: | Enthalpy of fusion at standard conditions |
| hvac: | Enthalpy of vaporization at standard conditions |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mccol: | 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 |

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