

Glutaric acid, 3-methylbut-2-yl phenethyl ester

Inchi: InChI=1S/C18H26O4/c1-14(2)15(3)22-18(20)11-7-10-17(19)21-13-12-16-8-5-4-6-9-16/h4
InchiKey: KSQWXHKZPYOBAG-UHFFFAOYSA-N
Formula: C18H26O4
SMILES: CC(C)C(C)OC(=O)CCCC(=O)OCCc1ccccc1
Mol. weight [g/mol]: 306.40

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -259.63 | kJ/mol | Joback Method |
| hf | -678.48 | kJ/mol | Joback Method |
| hfus | 34.94 | kJ/mol | Joback Method |
| hvap | 75.47 | kJ/mol | Joback Method |
| log10ws | -4.06 | | Crippen Method |
| logp | 3.530 | | Crippen Method |
| mcvol | 255.600 | ml/mol | McGowan Method |
| pc | 1591.08 | kPa | Joback Method |
| rinpola | 2133.00 | | NIST Webbook |
| rinpola | 2133.00 | | NIST Webbook |
| tb | 789.62 | K | Joback Method |
| tc | 993.35 | K | Joback Method |
| tf | 433.36 | K | Joback Method |
| vc | 0.972 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 763.01 | J/molxK | 789.62 | Joback Method |
| cpg | 779.16 | J/molxK | 823.58 | Joback Method |
| cpg | 794.20 | J/molxK | 857.53 | Joback Method |
| cpg | 808.13 | J/molxK | 891.49 | Joback Method |
| cpg | 820.99 | J/molxK | 925.44 | Joback Method |
| cpg | 832.79 | J/molxK | 959.40 | Joback Method |
| cpg | 843.56 | J/molxK | 993.35 | Joback Method |
| dvisc | 0.0011751 | Paxs | 433.36 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0005318 | Paxs | 492.74 | Joback Method |
| dvisc | 0.0002855 | Paxs | 552.11 | Joback Method |
| dvisc | 0.0001729 | Paxs | 611.49 | Joback Method |
| dvisc | 0.0001144 | Paxs | 670.87 | Joback Method |
| dvisc | 0.0000810 | Paxs | 730.24 | Joback Method |
| dvisc | 0.0000604 | Paxs | 789.62 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |
| 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=U391787&Units=SI |

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 |

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