

5-Phenylvaleric acid, hexyl ester

| | |
|-----------------------------|---|
| Inchi: | InChI=1S/C17H26O2/c1-2-3-4-10-15-19-17(18)14-9-8-13-16-11-6-5-7-12-16/h5-7,11-12H |
| InchiKey: | MDGSXKNIPGHYHH-UHFFFAOYSA-N |
| Formula: | C17H26O2 |
| SMILES: | CCCCCOC(=O)CCCCc1ccccc1 |
| Mol. weight [g/mol]: | 262.39 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -29.25 | kJ/mol | Joback Method |
| hf | -402.48 | kJ/mol | Joback Method |
| hfus | 36.61 | kJ/mol | Joback Method |
| hvap | 64.87 | kJ/mol | Joback Method |
| log10ws | -4.90 | | Crippen Method |
| logp | 4.523 | | Crippen Method |
| mcvol | 234.070 | ml/mol | McGowan Method |
| pc | 1635.13 | kPa | Joback Method |
| rinpol | 1989.00 | | NIST Webbook |
| rinpol | 1989.00 | | NIST Webbook |
| tb | 691.33 | K | Joback Method |
| tc | 884.75 | K | Joback Method |
| tf | 379.93 | K | Joback Method |
| vc | 0.903 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 654.86 | J/molxK | 691.33 | Joback Method |
| cpg | 672.36 | J/molxK | 723.57 | Joback Method |
| cpg | 688.87 | J/molxK | 755.80 | Joback Method |
| cpg | 704.44 | J/molxK | 788.04 | Joback Method |
| cpg | 719.09 | J/molxK | 820.27 | Joback Method |
| cpg | 732.85 | J/molxK | 852.51 | Joback Method |
| cpg | 745.76 | J/molxK | 884.75 | Joback Method |
| dvisc | 0.0016807 | Paxs | 379.93 | Joback Method |

| | | | | |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0008086 | Paxs | 431.83 | Joback Method |
| dvisc | 0.0004552 | Paxs | 483.73 | Joback Method |
| dvisc | 0.0002864 | Paxs | 535.63 | Joback Method |
| dvisc | 0.0001956 | Paxs | 587.53 | Joback Method |
| dvisc | 0.0001421 | Paxs | 639.43 | Joback Method |
| dvisc | 0.0001083 | Paxs | 691.33 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.cheméo.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=U406075&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 |

Latest version available from:

<https://www.cheméo.com/cid/90-371-0/5-Phenylvaleric-acid-hexyl-ester.pdf>

Generated by Cheméo on 2024-04-26 16:13:36.501304817 +0000 UTC m=+16437265.421882132.

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