

4-Chlorohexanoic acid, methyl ester

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| Inchi: | InChI=1S/C7H13ClO2/c1-3-6(8)4-5-7(9)10-2/h6H,3-5H2,1-2H3 |
| InchiKey: | DHKHERPAWHFRPE-UHFFFAOYSA-N |
| Formula: | C7H13ClO2 |
| SMILES: | CCC(Cl)CCC(=O)OC |
| Mol. weight [g/mol]: | 164.63 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -240.23 | kJ/mol | Joback Method |
| hf | -453.63 | kJ/mol | Joback Method |
| hfus | 17.35 | kJ/mol | Joback Method |
| hvap | 44.33 | kJ/mol | Joback Method |
| log10ws | -1.88 | | Crippen Method |
| logp | 1.957 | | Crippen Method |
| mcvol | 129.170 | ml/mol | McGowan Method |
| pc | 2850.52 | kPa | Joback Method |
| ripol | 1083.00 | | NIST Webbook |
| ripol | 1083.00 | | NIST Webbook |
| ripol | 1526.00 | | NIST Webbook |
| ripol | 1570.00 | | NIST Webbook |
| ripol | 1526.00 | | NIST Webbook |
| tb | 472.84 | K | Joback Method |
| tc | 659.46 | K | Joback Method |
| tf | 255.73 | K | Joback Method |
| vc | 0.494 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 265.41 | J/molxK | 472.84 | Joback Method |
| cpg | 276.52 | J/molxK | 503.94 | Joback Method |
| cpg | 287.19 | J/molxK | 535.05 | Joback Method |
| cpg | 297.44 | J/molxK | 566.15 | Joback Method |
| cpg | 307.25 | J/molxK | 597.25 | Joback Method |

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|-------|-----------|---------|--------|---------------|
| cpg | 316.63 | J/molxK | 628.35 | Joback Method |
| cpg | 325.59 | J/molxK | 659.46 | Joback Method |
| dvisc | 0.0043091 | Paxs | 255.73 | Joback Method |
| dvisc | 0.0020358 | Paxs | 291.92 | Joback Method |
| dvisc | 0.0011348 | Paxs | 328.10 | Joback Method |
| dvisc | 0.0007104 | Paxs | 364.28 | Joback Method |
| dvisc | 0.0004840 | Paxs | 400.47 | Joback Method |
| dvisc | 0.0003514 | Paxs | 436.65 | Joback Method |
| dvisc | 0.0002680 | Paxs | 472.84 | 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=R309398&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 |
| mccvol: | McGowan's characteristic volume |
| pc: | Critical Pressure |
| rinpol: | Non-polar retention indices |
| ripol: | Polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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