

(S)-4-Methoxy-6-phenethyl-5,6-dihydro-2H-pyran-2-one

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|-----------------------------|---|
| Inchi: | InChI=1S/C14H16O3/c1-16-13-9-12(17-14(15)10-13)8-7-11-5-3-2-4-6-11/h2-6,10,12H,7- |
| InchiKey: | VOOYTQRREPYRIW-GFCCVEGCSA-N |
| Formula: | C14H16O3 |
| SMILES: | COC1=CC(=O)OC(CCC2CCCCC2)C1 |
| Mol. weight [g/mol]: | 232.28 |
| CAS: | 587-63-3 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -89.52 | kJ/mol | Joback Method |
| hf | -397.05 | kJ/mol | Joback Method |
| hfus | 27.40 | kJ/mol | Joback Method |
| hvap | 61.58 | kJ/mol | Joback Method |
| log10ws | -3.09 | | Crippen Method |
| logp | 2.465 | | Crippen Method |
| mvol | 182.510 | ml/mol | McGowan Method |
| pc | 2510.03 | kPa | Joback Method |
| rinpol | 2168.10 | | NIST Webbook |
| rinpol | 2168.10 | | NIST Webbook |
| tb | 687.28 | K | Joback Method |
| tc | 927.69 | K | Joback Method |
| tf | 411.64 | K | Joback Method |
| vc | 0.676 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 506.08 | J/molxK | 687.28 | Joback Method |
| cpg | 524.08 | J/molxK | 727.35 | Joback Method |
| cpg | 540.75 | J/molxK | 767.42 | Joback Method |
| cpg | 556.07 | J/molxK | 807.49 | Joback Method |
| cpg | 570.06 | J/molxK | 847.55 | Joback Method |
| cpg | 582.70 | J/molxK | 887.62 | Joback Method |
| cpg | 593.99 | J/molxK | 927.69 | 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=C587633&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| Crippen Method: | https://www.cheméo.com/doc/models/crippen_log10ws |

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 |
| rinpola: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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