

5,5-epoxymethano-2,2,6-trimethyl-7-oxa-bicyclo[4

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|-----------------------------|--|
| Inchi: | InChI=1S/C14H20O3/c1-12(2)6-7-14(9-16-14)13(3)5-4-10(12)8-11(15)17-13/h8H,4-7,9H |
| InchiKey: | AEHGIVBQTMUBU-UHFFFAOYSA-N |
| Formula: | C14H20O3 |
| SMILES: | CC1(C)CCC2(CO2)C2(C)CCC1=CC(=O)O2 |
| Mol. weight [g/mol]: | 236.31 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | -90.12 | kJ/mol | Joback Method |
| hf | -448.20 | kJ/mol | Joback Method |
| hfus | 15.43 | kJ/mol | Joback Method |
| hvap | 57.95 | kJ/mol | Joback Method |
| log10ws | -3.15 | | Crippen Method |
| logp | 2.598 | | Crippen Method |
| mcvol | 184.550 | ml/mol | McGowan Method |
| pc | 2773.00 | kPa | Joback Method |
| rinpol | 1622.00 | | NIST Webbook |
| rinpol | 1622.00 | | NIST Webbook |
| ripol | 2604.00 | | NIST Webbook |
| ripol | 2604.00 | | NIST Webbook |
| tb | 683.60 | K | Joback Method |
| tc | 946.16 | K | Joback Method |
| tf | 493.62 | K | Joback Method |
| vc | 0.688 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 552.48 | J/molxK | 683.60 | Joback Method |
| cpg | 573.16 | J/molxK | 727.36 | Joback Method |
| cpg | 593.41 | J/molxK | 771.12 | Joback Method |
| cpg | 613.79 | J/molxK | 814.88 | Joback Method |
| cpg | 634.82 | J/molxK | 858.64 | Joback Method |
| cpg | 657.07 | J/molxK | 902.40 | Joback Method |

Sources

| | |
|------------------------|---|
| 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=R434914&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

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 |
| 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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