

4-methyl-2,3-epoxypentane, cis

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|----------------------|---|
| Inchi: | InChI=1S/C6H12O/c1-4(2)6-5(3)7-6/h4-6H,1-3H3/t5-,6+/m1/s1 |
| InchiKey: | AYTCGOOJNRZGBU-RITPCOANSA-N |
| Formula: | C6H12O |
| SMILES: | CC(C)C1OC1C |
| Mol. weight [g/mol]: | 100.16 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -35.88 | kJ/mol | Joback Method |
| hf | -251.99 | kJ/mol | Joback Method |
| hfus | 14.96 | kJ/mol | Joback Method |
| hvap | 32.68 | kJ/mol | Joback Method |
| log10ws | -1.30 | | Crippen Method |
| logp | 1.430 | | Crippen Method |
| mcvol | 90.410 | ml/mol | McGowan Method |
| pc | 3468.36 | kPa | Joback Method |
| rinpol | 713.60 | | NIST Webbook |
| rinpol | 715.40 | | NIST Webbook |
| rinpol | 712.40 | | NIST Webbook |
| rinpol | 715.40 | | NIST Webbook |
| tb | 365.26 | K | Joback Method |
| tc | 549.25 | K | Joback Method |
| tf | 182.65 | K | Joback Method |
| vc | 0.343 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 169.90 | J/molxK | 365.26 | Joback Method |
| cpg | 226.59 | J/molxK | 518.58 | Joback Method |
| cpg | 216.34 | J/molxK | 487.92 | Joback Method |
| cpg | 205.56 | J/molxK | 457.25 | Joback Method |
| cpg | 194.25 | J/molxK | 426.59 | Joback Method |
| cpg | 182.36 | J/molxK | 395.92 | Joback Method |

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|-------|-----------|---------|--------|---------------|
| cpg | 236.34 | J/mol×K | 549.25 | Joback Method |
| dvisc | 0.0003404 | Paxs | 365.26 | Joback Method |
| dvisc | 0.0003739 | Paxs | 334.82 | Joback Method |
| dvisc | 0.0004184 | Paxs | 304.39 | Joback Method |
| dvisc | 0.0004800 | Paxs | 273.95 | Joback Method |
| dvisc | 0.0005700 | Paxs | 243.52 | Joback Method |
| dvisc | 0.0007109 | Paxs | 213.09 | Joback Method |
| dvisc | 0.0009543 | Paxs | 182.65 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=R32660&Units=SI |
| 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 |

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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