

# Dicyclopentadiene, 1,2-dihydro, exo

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C10H14/c1-2-9-7-4-5-8(6-7)10(9)3-1/h4-5,7-10H,1-3,6H2/t7?,8?,9-,10+ |
| <b>InchiKey:</b>            | WHNYVDJJCTVMGO-OXYCZDQYSA-N  |
| <b>Formula:</b>             | C10H14   |
| <b>SMILES:</b>              | C1=CC2CC1C1CCCC21  |
| <b>Mol. weight [g/mol]:</b> | 134.22   |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | 225.72  | kJ/mol               | Joback Method  |
| hf            | -0.05   | kJ/mol               | Joback Method  |
| hfus          | 16.25   | kJ/mol               | Joback Method  |
| hvap          | 37.75   | kJ/mol               | Joback Method  |
| log10ws       | -2.58   |                      | Crippen Method |
| logp          | 2.609   |                      | Crippen Method |
| mcvol         | 114.880 | ml/mol               | McGowan Method |
| pc            | 3228.31 | kPa                  | Joback Method  |
| rinpola       | 1007.00 |                      | NIST Webbook   |
| rinpola       | 1007.00 |                      | NIST Webbook   |
| tb            | 447.18  | K                    | Joback Method  |
| tc            | 663.03  | K                    | Joback Method  |
| tf            | 249.28  | K                    | Joback Method  |
| vc            | 0.444   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 257.68    | J/molxK | 447.18          | Joback Method |
| cpg           | 277.50    | J/molxK | 483.15          | Joback Method |
| cpg           | 295.87    | J/molxK | 519.13          | Joback Method |
| cpg           | 312.91    | J/molxK | 555.10          | Joback Method |
| cpg           | 328.70    | J/molxK | 591.08          | Joback Method |
| cpg           | 343.35    | J/molxK | 627.05          | Joback Method |
| cpg           | 356.95    | J/molxK | 663.03          | Joback Method |
| dvisc         | 0.0004996 | Paxs    | 249.28          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0006099 | Paxs | 282.26 | Joback Method |
| dvisc | 0.0007141 | Paxs | 315.25 | Joback Method |
| dvisc | 0.0008115 | Paxs | 348.23 | Joback Method |
| dvisc | 0.0009021 | Paxs | 381.21 | Joback Method |
| dvisc | 0.0009859 | Paxs | 414.20 | Joback Method |
| dvisc | 0.0010635 | Paxs | 447.18 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R386439&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R386439&amp;Units=SI</a> |

## Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

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