

(+/-) -

[1S-(1«beta»,4«beta»,4a«beta»,6«alpha»,8a«alpha

3,4,4a,5,6,7,8,8a-decahydro-1,6-naphthalenediol

Formula:

C15H28O2

SMILES:

CC(C)C1CCC(C)(O)C2CCC(C)(O)CC12

Mol. weight [g/mol]:

240.38

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -161.67 | kJ/mol  | Joback Method  |
| hf            | -572.25 | kJ/mol  | Joback Method  |
| hfus          | 17.75   | kJ/mol  | Joback Method  |
| hvap          | 79.24   | kJ/mol  | Joback Method  |
| log10ws       | -3.67   |         | Crippen Method |
| logp          | 2.971   |         | Crippen Method |
| mcvol         | 212.230 | ml/mol  | McGowan Method |
| pc            | 2235.52 | kPa     | Joback Method  |
| rinsol        | 1740.00 |         | NIST Webbook   |
| tb            | 743.55  | K       | Joback Method  |
| tc            | 942.30  | K       | Joback Method  |
| tf            | 422.33  | K       | Joback Method  |
| vc            | 0.782   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 691.30 | J/molxK | 743.55          | Joback Method |
| cpg           | 709.90 | J/molxK | 776.67          | Joback Method |
| cpg           | 728.06 | J/molxK | 809.80          | Joback Method |
| cpg           | 745.95 | J/molxK | 842.92          | Joback Method |
| cpg           | 763.74 | J/molxK | 876.05          | Joback Method |
| cpg           | 781.60 | J/molxK | 909.17          | Joback Method |
| cpg           | 799.70 | J/molxK | 942.30          | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <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=R496541&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R496541&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |

# Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <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>hvac:</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>mccol:</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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