

# Acetyl eugenol

|                             |   |
|-----------------------------|---|
| <b>Other names:</b>         | Eugenyl acetate   |
| <b>Inchi:</b>               | InChI=1S/C12H14O3/c1-4-5-10-6-7-11(15-9(2)13)8-12(10)14-3/h4,6-8H,1,5H2,2-3H3 |
| <b>InchiKey:</b>            | MUFKFMXVLWHCHY-UHFFFAOYSA-N   |
| <b>Formula:</b>             | C12H14O3  |
| <b>SMILES:</b>              | <chem>C=CCc1ccc(OC(C)=O)cc1OC</chem>  |
| <b>Mol. weight [g/mol]:</b> | 206.24  |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -107.77 | kJ/mol  | Joback Method  |
| hf            | -329.01 | kJ/mol  | Joback Method  |
| hfus          | 22.79   | kJ/mol  | Joback Method  |
| hvap          | 56.80   | kJ/mol  | Joback Method  |
| log10ws       | -2.98   |         | Crippen Method |
| logp          | 2.349   |         | Crippen Method |
| mcvol         | 165.190 | ml/mol  | McGowan Method |
| pc            | 2505.01 | kPa     | Joback Method  |
| rinpol        | 1525.00 |         | NIST Webbook   |
| tb            | 605.99  | K       | Joback Method  |
| tc            | 815.85  | K       | Joback Method  |
| tf            | 369.09  | K       | Joback Method  |
| vc            | 0.623   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 397.71    | J/molxK | 605.99          | Joback Method |
| cpg           | 411.50    | J/molxK | 640.97          | Joback Method |
| cpg           | 424.56    | J/molxK | 675.94          | Joback Method |
| cpg           | 436.90    | J/molxK | 710.92          | Joback Method |
| cpg           | 448.51    | J/molxK | 745.90          | Joback Method |
| cpg           | 459.40    | J/molxK | 780.88          | Joback Method |
| cpg           | 469.57    | J/molxK | 815.85          | Joback Method |
| dvisc         | 0.0009921 | Paxs    | 369.09          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0006199 | Paxs | 408.57 | Joback Method |
| dvisc | 0.0004207 | Paxs | 448.06 | Joback Method |
| dvisc | 0.0003041 | Paxs | 487.54 | Joback Method |
| dvisc | 0.0002307 | Paxs | 527.02 | Joback Method |
| dvisc | 0.0001819 | Paxs | 566.51 | Joback Method |
| dvisc | 0.0001480 | Paxs | 605.99 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <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=U284911&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U284911&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>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</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                                 |

Latest version available from:

<https://www.chemeo.com/cid/85-505-7/Acetyl-eugenol.pdf>

Generated by Cheméo on 2024-04-23 07:20:42.174393807 +0000 UTC m=+16146091.094971118.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.