

# 3-Methoxy-1,5-dimethyl-1,3-cyclohexadiene

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| Inchi:               | InChI=1S/C9H14O/c1-7-4-8(2)6-9(5-7)10-3/h5-7H,4H2,1-3H3 |
| InchiKey:            | SNEXTYOVZVMOCT-UHFFFAOYSA-N                             |
| Formula:             | C9H14O                                                  |
| SMILES:              | COC1=CC(C)CC(C)=C1                                      |
| Mol. weight [g/mol]: | 138.21                                                  |
| CAS:                 | 98677-98-6                                              |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -14.99  | kJ/mol  | Joback Method  |
| hf            | -214.37 | kJ/mol  | Joback Method  |
| hfus          | 13.75   | kJ/mol  | Joback Method  |
| hvap          | 40.38   | kJ/mol  | Joback Method  |
| log10ws       | -2.53   |         | Crippen Method |
| logp          | 2.503   |         | Crippen Method |
| mcvol         | 124.080 | ml/mol  | McGowan Method |
| pc            | 2915.53 | kPa     | Joback Method  |
| tb            | 455.57  | K       | Joback Method  |
| tc            | 660.32  | K       | Joback Method  |
| tf            | 247.36  | K       | Joback Method  |
| vc            | 0.463   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 255.17    | J/mol×K | 455.57          | Joback Method |
| cpg           | 269.90    | J/mol×K | 489.69          | Joback Method |
| cpg           | 284.03    | J/mol×K | 523.82          | Joback Method |
| cpg           | 297.54    | J/mol×K | 557.94          | Joback Method |
| cpg           | 310.45    | J/mol×K | 592.07          | Joback Method |
| cpg           | 322.75    | J/mol×K | 626.19          | Joback Method |
| cpg           | 334.45    | J/mol×K | 660.32          | Joback Method |
| dvisc         | 0.0015726 | Pa×s    | 247.36          | Joback Method |
| dvisc         | 0.0009053 | Pa×s    | 282.06          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0005882 | Pa×s | 316.76 | Joback Method |
| dvisc | 0.0004162 | Pa×s | 351.47 | Joback Method |
| dvisc | 0.0003133 | Pa×s | 386.17 | Joback Method |
| dvisc | 0.0002472 | Pa×s | 420.87 | Joback Method |
| dvisc | 0.0002022 | Pa×s | 455.57 | Joback Method |

## Sources

|                        |                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <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=C98677986&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C98677986&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>                             |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</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>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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