

Benzene, (1-methyl-2-cyclopropen-1-yl)-

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|-----------------------------|---|
| Other names: | 3-Methyl-3-phenylcyclopropene 1-Cyclopropene, 3-methyl-3-phenyl- 1-Methyl-1-phenyl-2-cyclopropene |
| Inchi: | InChI=1S/C10H10/c1-10(7-8-10)9-5-3-2-4-6-9/h2-8H,1H3 |
| InchiKey: | QPQKDBYTARBUDX-UHFFFAOYSA-N |
| Formula: | C10H10 |
| SMILES: | CC1(c2ccccc2)C=C1 |
| Mol. weight [g/mol]: | 130.19 |
| CAS: | 65051-83-4 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 230.95 | kJ/mol | Joback Method |
| hf | 132.62 | kJ/mol | Joback Method |
| hfus | 8.76 | kJ/mol | Joback Method |
| hvap | 39.18 | kJ/mol | Joback Method |
| ie | 8.49 | eV | NIST Webbook |
| ie | 8.29 | eV | NIST Webbook |
| ie | 8.20 | eV | NIST Webbook |
| log10ws | -2.53 | | Crippen Method |
| logp | 2.514 | | Crippen Method |
| mcvol | 112.840 | ml/mol | McGowan Method |
| pc | 3736.23 | kPa | Joback Method |
| tb | 461.02 | K | Joback Method |
| tc | 695.62 | K | Joback Method |
| tf | 271.48 | K | Joback Method |
| vc | 0.428 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 227.03 | J/mol×K | 461.02 | Joback Method |
| cpg | 242.32 | J/mol×K | 500.12 | Joback Method |
| cpg | 256.12 | J/mol×K | 539.22 | Joback Method |

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|-----|--------|---------|--------|---------------|
| cpg | 268.62 | J/mol×K | 578.32 | Joback Method |
| cpg | 280.00 | J/mol×K | 617.42 | Joback Method |
| cpg | 290.47 | J/mol×K | 656.52 | Joback Method |
| cpg | 300.20 | J/mol×K | 695.62 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=C65051834&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 |
| 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 |
| ie: | Ionization energy |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume |
| pc: | Critical Pressure |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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<https://www.chemeo.com/cid/60-492-9/Benzene-1-methyl-2-cyclopropen-1-yl.pdf>

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