# Cyclooctene, 3-methyl-

**Inchi:** InChI=1S/C9H16/c1-9-7-5-3-2-4-6-8-9/h5,7,9H,2-4,6,8H2,1H3
**InchiKey:** VGMAAJKEQOXIML-UHFFFAOYSA-N
**Formula:** C9H16
**SMILES:** CC1C=CCCCCC1
**Mol. weight [g/mol]:** 124.22
**CAS:** 13152-05-1

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 55.11 | kJ/mol | Joback Method |
| hf | -129.31 | kJ/mol | Joback Method |
| hfus | 7.92 | kJ/mol | Joback Method |
| hvap | 36.69 | kJ/mol | Joback Method |
| log10ws | -3.10 | | Crippen Method |
| logp | 3.143 | | Crippen Method |
| mcvol | 122.510 | ml/mol | McGowan Method |
| pc | 3117.52 | kPa | Joback Method |
| rinpol | 958.00 | | NIST Webbook |
| rinpol | 958.00 | | NIST Webbook |
| rinpol | 958.00 | | NIST Webbook |
| tb | 432.57 | K | Joback Method |
| tc | 650.62 | K | Joback Method |
| tf | 192.29 | K | Joback Method |
| vc | 0.443 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 239.90 | J/mol×K | 432.57 | Joback Method |
| cpg | 259.46 | J/mol×K | 468.91 | Joback Method |
| cpg | 278.04 | J/mol×K | 505.25 | Joback Method |
| cpg | 295.66 | J/mol×K | 541.59 | Joback Method |
| cpg | 312.33 | J/mol×K | 577.93 | Joback Method |
| cpg | 328.06 | J/mol×K | 614.28 | Joback Method |

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|---|---|---|---|---|
| cpg | 342.86 | J/mol×K | 650.62 | Joback Method |
| dvisc | 0.0212194 | Pa×s | 192.29 | Joback Method |
| dvisc | 0.0049975 | Pa×s | 232.34 | Joback Method |
| dvisc | 0.0018006 | Pa×s | 272.38 | Joback Method |
| dvisc | 0.0008429 | Pa×s | 312.43 | Joback Method |
| dvisc | 0.0004688 | Pa×s | 352.48 | Joback Method |
| dvisc | 0.0002939 | Pa×s | 392.52 | Joback Method |
| dvisc | 0.0002009 | Pa×s | 432.57 | Joback Method |

# Sources

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|---|---|
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C13152051&Units=SI |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |

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