# Cyclohexene, 4-methyl-1-(1-methylethyl)-, (R)-

**Other names:** p-Menth-3-ene, (R)-(+)-
(+)-3-Menthene
1-Isopropyl-4-methyl-1-cyclohexene, (R)-
**Inchi:** InChI=1S/C10H18/c1-8(2)10-6-4-9(3)5-7-10/h6,8-9H,4-5,7H2,1-3H3/t9-/m1/s1
**InchiKey:** YYCPSEFQLGXPCO-SECBINFHSA-N
**Formula:** C10H18
**SMILES:** CC1CC=C(C(C)C)CC1
**Mol. weight [g/mol]:** 138.25
**CAS:** 619-52-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 75.66 | kJ/mol | Joback Method |
| hf | -154.38 | kJ/mol | Joback Method |
| hfus | 10.80 | kJ/mol | Joback Method |
| hvap | 38.85 | kJ/mol | Joback Method |
| log10ws | -3.27 | | Crippen Method |
| logp | 3.389 | | Crippen Method |
| mcvol | 136.600 | ml/mol | McGowan Method |
| pc | 2646.11 | kPa | Joback Method |
| tb | 441.20 ± 0.50 | K | NIST Webbook |
| tc | 656.32 | K | Joback Method |
| tf | 208.12 | K | Joback Method |
| vc | 0.508 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 286.78 | J/mol×K | 451.45 | Joback Method |
| cpg | 305.15 | J/mol×K | 485.59 | Joback Method |
| cpg | 322.63 | J/mol×K | 519.74 | Joback Method |
| cpg | 339.23 | J/mol×K | 553.88 | Joback Method |
| cpg | 354.99 | J/mol×K | 588.03 | Joback Method |
| cpg | 369.91 | J/mol×K | 622.17 | Joback Method |

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|---|---|---|---|---|
| cpg | 384.04 | J/mol×K | 656.32 | Joback Method |
| dvisc | 0.0061732 | Pa×s | 208.12 | Joback Method |
| dvisc | 0.0022871 | Pa×s | 248.67 | Joback Method |
| dvisc | 0.0011194 | Pa×s | 289.23 | Joback Method |
| dvisc | 0.0006532 | Pa×s | 329.78 | Joback Method |
| dvisc | 0.0004288 | Pa×s | 370.34 | Joback Method |
| dvisc | 0.0003059 | Pa×s | 410.89 | Joback Method |
| dvisc | 0.0002319 | Pa×s | 451.45 | Joback Method |

# Sources

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|---|---|
| **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=C619523&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |