# (R)-1-Methyl-4-(6-methylhept-5-en-2-yl)cyclohexa-

**Other names:** «beta»-Curcumene
1,4-Cyclohexadiene, 1-(1,5-dimethyl-4-hexenyl)-4-methyl-, (R)-
«beta»-Curcumenene
**Inchi:** InChI=1S/C15H24/c1-12(2)6-5-7-14(4)15-10-8-13(3)9-11-15/h6,8-11,13-15H,5,7H2,1-4H
**InchiKey:** OFTGWWXCYHSXPO-UHFFFAOYSA-N
**Formula:** C15H24
**SMILES:** CC(C)=CCCC(C)C1C=CC(C)C=C1
**Mol. weight [g/mol]:** 204.35
**CAS:** 28976-67-2

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 221.31 | kJ/mol | Joback Method |
| hf | -101.24 | kJ/mol | Joback Method |
| hfus | 25.32 | kJ/mol | Joback Method |
| hvap | 49.34 | kJ/mol | Joback Method |
| log10ws | -4.83 | | Crippen Method |
| logp | 4.747 | | Crippen Method |
| mcvol | 198.450 | ml/mol | McGowan Method |
| pc | 1812.32 | kPa | Joback Method |
| rinpol | 1513.00 | | NIST Webbook |
| rinpol | 1510.00 | | NIST Webbook |
| rinpol | 1516.00 | | NIST Webbook |
| rinpol | 1501.00 | | NIST Webbook |
| rinpol | 1510.00 | | NIST Webbook |
| rinpol | 1498.00 | | NIST Webbook |
| rinpol | 1503.00 | | NIST Webbook |
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| rinpol | 1512.00 | | NIST Webbook |
| rinpol | 1503.00 | | NIST Webbook |
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| ripol | 1740.00 | | NIST Webbook |
| ripol | 1712.00 | | NIST Webbook |
| ripol | 1756.00 | | NIST Webbook |
| ripol | 1728.00 | | NIST Webbook |
| ripol | 1733.00 | | NIST Webbook |
| ripol | 1731.00 | | NIST Webbook |
| tb | 559.40 | K | Joback Method |
| tc | 763.53 | K | Joback Method |
| tf | 229.43 | K | Joback Method |
| vc | 0.754 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 494.30 | J/mol×K | 559.40 | Joback Method |
| cpg | 515.63 | J/mol×K | 593.42 | Joback Method |
| cpg | 535.77 | J/mol×K | 627.44 | Joback Method |
| cpg | 554.77 | J/mol×K | 661.47 | Joback Method |
| cpg | 572.67 | J/mol×K | 695.49 | Joback Method |
| cpg | 589.52 | J/mol×K | 729.51 | Joback Method |
| cpg | 605.38 | J/mol×K | 763.53 | Joback Method |

# Sources

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C28976672&Units=SI

**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

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