# 1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1«alpha»,2«alpha»,3a«beta»,4«alpha»,8a«bet

| | |
|---|---|
| **Other names:** | Longicyclene<br>1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1«alpha»,2«alpha»,3a«beta»,4«alpha»,8a«beta»,9R)]-<br>«alpha»-Longicyclene<br>[1S-(1«alpha»,2«alpha»,3a«beta»,4«alpha»,8a«beta»,9R*)]-decahydro-1,5,5,8a-tetramet |
| **Inchi:** | InChI=1S/C15H24/c1-13(2)6-5-7-14(3)9-8-10-12(11(9)13)15(10,14)4/h9-12H,5-8H2,1-4H |
| **InchiKey:** | WCEIQUQVIOGRBF-UHFFFAOYSA-N |
| **Formula:** | C15H24 |
| **SMILES:** | CC1(C)CCCC2(C)C3CC4C(C31)C42C |
| **Mol. weight [g/mol]:** | 204.35 |
| **CAS:** | 1137-12-8 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 290.92 | kJ/mol | Joback Method |
| hf | -70.87 | kJ/mol | Joback Method |
| hfus | 13.56 | kJ/mol | Joback Method |
| hvap | 44.08 | kJ/mol | Joback Method |
| log10ws | -3.99 | | Crippen Method |
| logp | 4.105 | | Crippen Method |
| mcvol | 178.770 | ml/mol | McGowan Method |
| pc | 2210.37 | kPa | Joback Method |
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1370.00 | | NIST Webbook |
| rinpol | 1399.10 | | NIST Webbook |
| rinpol | 1409.00 | | NIST Webbook |
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1374.00 | | NIST Webbook |
| rinpol | 1399.10 | | NIST Webbook |
| rinpol | 1372.00 | | NIST Webbook |
| rinpol | 1376.00 | | NIST Webbook |
| rinpol | 1377.20 | | NIST Webbook |
| rinpol | 1362.00 | | NIST Webbook |
| rinpol | 1372.00 | | NIST Webbook |
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1375.00 | | NIST Webbook |
| rinpol | 1376.00 | | NIST Webbook |
| rinpol | 1392.00 | | NIST Webbook |

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|---|---|---|---|
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1374.00 | | NIST Webbook |
| rinpol | 1371.00 | | NIST Webbook |
| rinpol | 1373.00 | | NIST Webbook |
| rinpol | 1370.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| rinpol | 1401.00 | | NIST Webbook |
| rinpol | 1370.00 | | NIST Webbook |
| rinpol | 1374.00 | | NIST Webbook |
| rinpol | 1376.00 | | NIST Webbook |
| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1374.00 | | NIST Webbook |
| rinpol | 1380.00 | | NIST Webbook |
| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1372.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| ripol | 1519.00 | | NIST Webbook |
| ripol | 1558.50 | | NIST Webbook |
| ripol | 1554.00 | | NIST Webbook |
| ripol | 1497.00 | | NIST Webbook |
| ripol | 1558.50 | | NIST Webbook |
| ripol | 1558.50 | | NIST Webbook |
| ripol | 1580.00 | | NIST Webbook |
| ripol | 1554.50 | | NIST Webbook |
| ripol | 1519.00 | | NIST Webbook |
| ripol | 1519.00 | | NIST Webbook |
| ripol | 1554.00 | | NIST Webbook |
| ripol | 1496.00 | | NIST Webbook |
| ripol | 1494.00 | | NIST Webbook |
| tb | 552.00 | K | Joback Method |
| tc | 775.96 | K | Joback Method |
| tf | 393.07 | K | Joback Method |
| vc | 0.703 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 503.97 | J/mol×K | 552.00 | Joback Method |
| cpg | 526.89 | J/mol×K | 589.33 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 547.94 | J/mol×K | 626.65 | Joback Method |
| cpg | 567.56 | J/mol×K | 663.98 | Joback Method |
| cpg | 586.20 | J/mol×K | 701.31 | Joback Method |
| cpg | 604.29 | J/mol×K | 738.63 | Joback Method |
| cpg | 622.26 | J/mol×K | 775.96 | Joback Method |

# Sources

| | |
|---|---|
| **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=C1137128&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 |
| **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 |