# Dodecane, 2,6,10-trimethyl-

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|---|---|
| **Other names:** | Farnesan |
| | Farnesane |
| | 2,6,10-Trimethyldodecane |
| **Inchi:** | InChI=1S/C15H32/c1-6-14(4)10-8-12-15(5)11-7-9-13(2)3/h13-15H,6-12H2,1-5H3 |
| **InchiKey:** | YFHFHLSMISYUAQ-UHFFFAOYSA-N |
| **Formula:** | C15H32 |
| **SMILES:** | CCC(C)CCCC(C)CCCC(C)C |
| **Mol. weight [g/mol]:** | 212.41 |
| **CAS:** | 3891-98-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 68.10 | kJ/mol | Joback Method |
| hf | -368.77 | kJ/mol | Joback Method |
| hfus | 24.04 | kJ/mol | Joback Method |
| hvap | 47.82 | kJ/mol | Joback Method |
| log10ws | -5.38 | | Crippen Method |
| logp | 5.665 | | Crippen Method |
| mcvol | 222.210 | ml/mol | McGowan Method |
| pc | 1441.35 | kPa | Joback Method |
| rinpol | 1366.00 | | NIST Webbook |
| rinpol | 1360.30 | | NIST Webbook |
| rinpol | 1392.00 | | NIST Webbook |
| rinpol | 1392.00 | | NIST Webbook |
| rinpol | 1376.00 | | NIST Webbook |
| rinpol | 1379.00 | | NIST Webbook |
| rinpol | 1364.00 | | NIST Webbook |
| rinpol | 1365.00 | | NIST Webbook |
| rinpol | 1379.00 | | NIST Webbook |
| rinpol | 1366.00 | | NIST Webbook |
| rinpol | 1366.00 | | NIST Webbook |
| rinpol | 1369.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| rinpol | 1358.00 | | NIST Webbook |
| rinpol | 1363.00 | | NIST Webbook |
| rinpol | 1365.00 | | NIST Webbook |
| rinpol | 1365.00 | | NIST Webbook |

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| rinpol | 1366.00 | | NIST Webbook |
| rinpol | 1366.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| rinpol | 1369.00 | | NIST Webbook |
| rinpol | 1381.00 | | NIST Webbook |
| rinpol | 1376.00 | | NIST Webbook |
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| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1379.00 | | NIST Webbook |
| rinpol | 1365.00 | | NIST Webbook |
| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1365.00 | | NIST Webbook |
| rinpol | 1382.00 | | NIST Webbook |
| rinpol | 1374.00 | | NIST Webbook |
| rinpol | 1379.00 | | NIST Webbook |
| rinpol | 1358.00 | | NIST Webbook |
| rinpol | 1368.00 | | NIST Webbook |
| ripol | 1362.00 | | NIST Webbook |
| ripol | 1344.00 | | NIST Webbook |
| ripol | 1350.00 | | NIST Webbook |
| ripol | 1354.00 | | NIST Webbook |
| ripol | 1360.00 | | NIST Webbook |
| tb | 525.10 ± 0.50 | K | NIST Webbook |
| tc | 708.78 | K | Joback Method |
| tf | 213.81 | K | Joback Method |
| vc | 0.858 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 558.60 | J/mol×K | 541.28 | Joback Method |
| cpg | 649.78 | J/mol×K | 680.87 | Joback Method |
| cpg | 633.08 | J/mol×K | 652.95 | Joback Method |
| cpg | 615.63 | J/mol×K | 625.03 | Joback Method |
| cpg | 597.41 | J/mol×K | 597.11 | Joback Method |
| cpg | 578.41 | J/mol×K | 569.20 | Joback Method |
| cpg | 665.77 | J/mol×K | 708.78 | Joback Method |
| dvisc | 0.0001394 | Pa×s | 541.28 | Joback Method |
| dvisc | 0.0002040 | Pa×s | 486.70 | Joback Method |
| dvisc | 0.0003285 | Pa×s | 432.12 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0006072 | Pa×s | 377.54 | Joback Method |
| dvisc | 0.0013813 | Pa×s | 322.97 | Joback Method |
| dvisc | 0.0043898 | Pa×s | 268.39 | Joback Method |
| dvisc | 0.0251735 | Pa×s | 213.81 | Joback Method |

# Sources

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|---|---|
| **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=C3891983&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

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