# Naphthalene, 6-ethyl-1,2,3,4-tetrahydro-

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|---|---|
| **Other names:** | 6-Ethyltetralin |
| | 6-Ethyltetraline |
| | 1,2,3,4-tetrahydro-6-ethylnaphthalene |
| | Tetraline, 6-ethyl |
| **Inchi:** | InChI=1S/C12H16/c1-2-10-7-8-11-5-3-4-6-12(11)9-10/h7-9H,2-6H2,1H3 |
| **InchiKey:** | DLHGUEXPTGUBGR-UHFFFAOYSA-N |
| **Formula:** | C12H16 |
| **SMILES:** | CCc1ccc2c(c1)CCCC2 |
| **Mol. weight [g/mol]:** | 160.26 |
| **CAS:** | 22531-20-0 |

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 199.67 | kJ/mol | Joback Method |
| hf | 9.56 | kJ/mol | Joback Method |
| hfus | 15.06 | kJ/mol | Joback Method |
| hvap | 46.30 | kJ/mol | Joback Method |
| log10ws | -3.77 | | Crippen Method |
| logp | 3.128 | | Crippen Method |
| mcvol | 145.320 | ml/mol | McGowan Method |
| pc | 2826.33 | kPa | Joback Method |
| rinpol | 1340.00 | | NIST Webbook |
| rinpol | 1348.00 | | NIST Webbook |
| rinpol | 1340.02 | | NIST Webbook |
| rinpol | 1339.38 | | NIST Webbook |
| tb | 526.28 | K | Joback Method |
| tc | 752.00 | K | Joback Method |
| tf | 295.12 | K | Joback Method |
| vc | 0.549 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 332.17 | J/mol×K | 526.28 | Joback Method |

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|---|---|---|---|---|
| cpg | 349.96 | J/mol×K | 563.90 | Joback Method |
| cpg | 366.60 | J/mol×K | 601.52 | Joback Method |
| cpg | 382.14 | J/mol×K | 639.14 | Joback Method |
| cpg | 396.66 | J/mol×K | 676.76 | Joback Method |
| cpg | 410.22 | J/mol×K | 714.38 | Joback Method |
| cpg | 422.89 | J/mol×K | 752.00 | Joback Method |
| dvisc | 0.0021455 | Pa×s | 295.12 | Joback Method |
| dvisc | 0.0012818 | Pa×s | 333.65 | Joback Method |
| dvisc | 0.0008520 | Pa×s | 372.17 | Joback Method |
| dvisc | 0.0006114 | Pa×s | 410.70 | Joback Method |
| dvisc | 0.0004645 | Pa×s | 449.23 | Joback Method |
| dvisc | 0.0003685 | Pa×s | 487.75 | Joback Method |
| dvisc | 0.0003024 | Pa×s | 526.28 | 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=C22531200&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