# 1-Isopropyl-4,7-dimethyl-1,2,3,4,5,6-hexahydronap

**Other names:** Cadina-1(6),4-diene
Naphthalene, 1,2,3,4,5,6-hexahydro-4,7-dimethyl-1-(1-methylethyl)-
7«alpha»H,10«beta»H-Cadina-1(6),4-diene
**Inchi:** InChI=1S/C15H24/c1-10(2)13-8-6-12(4)14-7-5-11(3)9-15(13)14/h9-10,12-13H,5-8H2,1-4
**InchiKey:** ULTBCADWJVQRCF-UHFFFAOYSA-N
**Formula:** C15H24
**SMILES:** CC1=CC2=C(CC1)C(C)CCC2C(C)C
**Mol. weight [g/mol]:** 204.35
**CAS:** 16729-00-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 177.11 | kJ/mol | Joback Method |
| hf | -156.10 | kJ/mol | Joback Method |
| hfus | 20.23 | kJ/mol | Joback Method |
| hvap | 51.68 | kJ/mol | Joback Method |
| log10ws | -4.87 | | Crippen Method |
| logp | 4.725 | | Crippen Method |
| mcvol | 191.890 | ml/mol | McGowan Method |
| pc | 1952.68 | kPa | Joback Method |
| rinpol | 1481.30 | | NIST Webbook |
| rinpol | 1481.30 | | NIST Webbook |
| rinpol | 1463.00 | | NIST Webbook |
| rinpol | 1472.00 | | NIST Webbook |
| rinpol | 1463.00 | | NIST Webbook |
| tb | 585.98 | K | Joback Method |
| tc | 802.43 | K | Joback Method |
| tf | 304.69 | K | Joback Method |
| vc | 0.724 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 503.23 | J/mol×K | 585.98 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 600.91 | J/mol×K | 766.36 | Joback Method |
| cpg | 583.72 | J/mol×K | 730.28 | Joback Method |
| cpg | 565.40 | J/mol×K | 694.21 | Joback Method |
| cpg | 545.92 | J/mol×K | 658.13 | Joback Method |
| cpg | 525.21 | J/mol×K | 622.06 | Joback Method |
| cpg | 617.03 | J/mol×K | 802.43 | Joback Method |
| dvisc | 0.0002988 | Pa×s | 585.98 | Joback Method |
| dvisc | 0.0003590 | Pa×s | 539.10 | Joback Method |
| dvisc | 0.0004467 | Pa×s | 492.22 | Joback Method |
| dvisc | 0.0005820 | Pa×s | 445.34 | Joback Method |
| dvisc | 0.0008070 | Pa×s | 398.45 | Joback Method |
| dvisc | 0.0012209 | Pa×s | 351.57 | Joback Method |
| dvisc | 0.0020981 | Pa×s | 304.69 | Joback Method |

# Sources

**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=C16729003&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
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point

**vc:** Critical Volume