# Naphthalene, decahydro-4a-methyl-1-methylene-7-(1-methyleth (4aR-trans)-

**Other names:** Eudesma-4(14),7(11)-diene
«gamma»-Selinene
Selina-4(14),7(11)-diene
(4«alpha»-trans)-Decahydro-4«alpha»-methyl-1-methylene-7-(1-methylethylidene)-naphth
Eudesma-4(15),7(11)-diene
Selina-4(15),7(11)-diene

**Inchi:** InChI=1S/C15H24/c1-11(2)13-7-9-15(4)8-5-6-12(3)14(15)10-13/h14H,3,5-10H2,1-2,4H3/

**InchiKey:** RMZHSBMIZBMVMN-LOACHALJSA-N

**Formula:** C15H24

**SMILES:** C=C1CCCC2(C)CCC(=C(C)C)CC12

**Mol. weight [g/mol]:** 204.35

**CAS:** 515-17-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 233.02 | kJ/mol | Joback Method |
| hf | -66.25 | kJ/mol | Joback Method |
| hfus | 14.03 | kJ/mol | Joback Method |
| hvap | 49.37 | kJ/mol | Joback Method |
| log10ws | -5.11 | | Crippen Method |
| logp | 4.869 | | Crippen Method |
| mcvol | 191.890 | ml/mol | McGowan Method |
| pc | 2066.12 | kPa | Joback Method |
| rinpol | 1473.00 | | NIST Webbook |
| rinpol | 1532.00 | | NIST Webbook |
| rinpol | 1530.00 | | NIST Webbook |
| rinpol | 1522.00 | | NIST Webbook |
| rinpol | 1477.00 | | NIST Webbook |
| rinpol | 1474.00 | | NIST Webbook |
| rinpol | 1487.00 | | NIST Webbook |
| rinpol | 1468.00 | | NIST Webbook |
| rinpol | 1438.00 | | NIST Webbook |
| rinpol | 1479.00 | | NIST Webbook |
| rinpol | 1509.00 | | NIST Webbook |
| rinpol | 1530.00 | | NIST Webbook |
| rinpol | 1484.00 | | NIST Webbook |
| rinpol | 1531.00 | | NIST Webbook |

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|---|---|---|---|
| rinpol | 1483.00 | | NIST Webbook |
| rinpol | 1487.00 | | NIST Webbook |
| rinpol | 1497.00 | | NIST Webbook |
| rinpol | 1470.00 | | NIST Webbook |
| rinpol | 1532.00 | | NIST Webbook |
| rinpol | 1532.00 | | NIST Webbook |
| rinpol | 1479.00 | | NIST Webbook |
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| rinpol | 1481.00 | | NIST Webbook |
| rinpol | 1512.00 | | NIST Webbook |
| rinpol | 1435.00 | | NIST Webbook |
| rinpol | 1517.00 | | NIST Webbook |
| rinpol | 1472.00 | | NIST Webbook |
| rinpol | 1473.00 | | NIST Webbook |
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| ripol | 1672.00 | | NIST Webbook |
| ripol | 1671.00 | | NIST Webbook |
| ripol | 1690.00 | | NIST Webbook |
| ripol | 1690.00 | | NIST Webbook |
| ripol | 1671.00 | | NIST Webbook |
| ripol | 1682.00 | | NIST Webbook |
| ripol | 1685.00 | | NIST Webbook |
| ripol | 1697.00 | | NIST Webbook |
| ripol | 1690.00 | | NIST Webbook |
| ripol | 1672.00 | | NIST Webbook |
| ripol | 1676.00 | | NIST Webbook |
| ripol | 1671.00 | | NIST Webbook |
| tb | 579.08 | K | Joback Method |
| tc | 805.02 | K | Joback Method |
| tf | 314.59 | K | Joback Method |
| vc | 0.724 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 499.65 | J/mol×K | 579.08 | Joback Method |
| cpg | 522.29 | J/mol×K | 616.74 | Joback Method |
| cpg | 543.51 | J/mol×K | 654.39 | Joback Method |

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|---|---|---|---|---|
| cpg | 563.48 | J/mol×K | 692.05 | Joback Method |
| cpg | 582.36 | J/mol×K | 729.71 | Joback Method |
| cpg | 600.33 | J/mol×K | 767.36 | Joback Method |
| cpg | 617.54 | J/mol×K | 805.02 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C515173&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 |

# 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 |