# (E)-2-Pentadecene

**Other names:** trans-2-Pentadecene
2-pentadecene (E)
**Inchi:** InChI=1S/C15H30/c1-3-5-7-9-11-13-15-14-12-10-8-6-4-2/h3,5H,4,6-15H2,1-2H3/b5-3+
**InchiKey:** PIKNPBDDTPJRGQ-HWKANZROSA-N
**Formula:** C15H30
**SMILES:** CC=CCCCCCCCCCCCC
**Mol. weight [g/mol]:** 210.40

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 155.64 | kJ/mol | Joback Method |
| hf | -235.71 | kJ/mol | Joback Method |
| hfus | 34.81 | kJ/mol | Joback Method |
| hvap | 48.94 | kJ/mol | Joback Method |
| log10ws | -5.95 | | Crippen Method |
| logp | 5.873 | | Crippen Method |
| mcvol | 217.910 | ml/mol | McGowan Method |
| pc | 1472.49 | kPa | Joback Method |
| rinpol | 1498.30 | | NIST Webbook |
| rinpol | 1498.80 | | NIST Webbook |
| rinpol | 1500.00 | | NIST Webbook |
| rinpol | 1498.30 | | NIST Webbook |
| rinpol | 1498.00 | | NIST Webbook |
| rinpol | 1507.00 | | NIST Webbook |
| rinpol | 1501.00 | | NIST Webbook |
| rinpol | 1497.00 | | NIST Webbook |
| ripol | 1537.40 | | NIST Webbook |
| ripol | 1537.00 | | NIST Webbook |
| tb | 546.76 | K | Joback Method |
| tc | 711.80 | K | Joback Method |
| tf | 253.73 | K | Joback Method |
| vc | 0.856 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 540.45 | J/mol×K | 546.76 | Joback Method |
| cpg | 625.10 | J/mol×K | 684.29 | Joback Method |
| cpg | 609.60 | J/mol×K | 656.78 | Joback Method |
| cpg | 593.41 | J/mol×K | 629.28 | Joback Method |
| cpg | 576.50 | J/mol×K | 601.77 | Joback Method |
| cpg | 558.86 | J/mol×K | 574.27 | Joback Method |
| cpg | 639.95 | J/mol×K | 711.80 | Joback Method |
| dvisc | 0.0001425 | Pa×s | 546.76 | Joback Method |
| dvisc | 0.0001932 | Pa×s | 497.92 | Joback Method |
| dvisc | 0.0002801 | Pa×s | 449.08 | Joback Method |
| dvisc | 0.0004444 | Pa×s | 400.25 | Joback Method |
| dvisc | 0.0008016 | Pa×s | 351.41 | Joback Method |
| dvisc | 0.0017495 | Pa×s | 302.57 | Joback Method |
| dvisc | 0.0051562 | Pa×s | 253.73 | Joback Method |

# Sources

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=R97808&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
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

# 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 |