# 1H-Indene, octahydro-2,2,4,4,7,7-hexamethyl-, trans-

**Inchi:** InChI=1S/C15H28/c1-13(2)9-11-12(10-13)15(5,6)8-7-14(11,3)4/h11-12H,7-10H2,1-6H3/t

**InchiKey:** RKCBUJRCTQZATH-RYUDHWBXSA-N

**Formula:** C15H28

**SMILES:** CC1(C)CC2C(C1)C(C)(C)CCC2(C)C

**Mol. weight [g/mol]:** 208.38

**CAS:** 54832-83-6

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 121.02 | kJ/mol | Joback Method |
| hf | -241.11 | kJ/mol | Joback Method |
| hfus | 8.89 | kJ/mol | Joback Method |
| hvap | 44.95 | kJ/mol | Joback Method |
| log10ws | -4.68 | | Crippen Method |
| logp | 4.885 | | Crippen Method |
| mcvol | 200.490 | ml/mol | McGowan Method |
| pc | 1911.91 | kPa | Joback Method |
| rinpol | 1427.10 | | NIST Webbook |
| rinpol | 1427.10 | | NIST Webbook |
| rinpol | 1427.10 | | NIST Webbook |
| tb | 555.60 | K | Joback Method |
| tc | 778.34 | K | Joback Method |
| tf | 343.11 | K | Joback Method |
| vc | 0.756 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 535.95 | J/mol×K | 555.60 | Joback Method |
| cpg | 560.92 | J/mol×K | 592.72 | Joback Method |
| cpg | 584.25 | J/mol×K | 629.85 | Joback Method |
| cpg | 606.28 | J/mol×K | 666.97 | Joback Method |
| cpg | 627.33 | J/mol×K | 704.09 | Joback Method |
| cpg | 647.74 | J/mol×K | 741.21 | Joback Method |

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|---|---|---|---|---|
| cpg | 667.85 | J/mol×K | 778.34 | 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=C54832836&Units=SI |

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