# dihydroachillene

**Inchi:** InChI=1S/C10H18/c1-6-10(9(4)5)7-8(2)3/h6,8H,1,7H2,2-5H3
**InchiKey:** SHAPROXLZFAPJP-UHFFFAOYSA-N
**Formula:** C10H18
**SMILES:** C=CC(CC(C)C)=C(C)C
**Mol. weight [g/mol]:** 138.25

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 181.84 | kJ/mol | Joback Method |
| hf | -31.94 | kJ/mol | Joback Method |
| hfus | 14.43 | kJ/mol | Joback Method |
| hvap | 36.91 | kJ/mol | Joback Method |
| log10ws | -3.47 | | Crippen Method |
| logp | 3.555 | | Crippen Method |
| mcvol | 143.160 | ml/mol | McGowan Method |
| pc | 2342.82 | kPa | Joback Method |
| ripol | 1547.00 | | NIST Webbook |
| ripol | 1547.00 | | NIST Webbook |
| ripol | 1547.00 | | NIST Webbook |
| ripol | 1547.00 | | NIST Webbook |
| ripol | 1547.00 | | NIST Webbook |
| ripol | 1547.00 | | NIST Webbook |
| tb | 428.36 | K | Joback Method |
| tc | 612.80 | K | Joback Method |
| tf | 152.70 | K | Joback Method |
| vc | 0.552 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 283.95 | J/mol×K | 428.36 | Joback Method |
| cpg | 299.33 | J/mol×K | 459.10 | Joback Method |
| cpg | 313.96 | J/mol×K | 489.84 | Joback Method |
| cpg | 327.88 | J/mol×K | 520.58 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 341.12 | J/mol×K | 551.32 | Joback Method |
| cpg | 353.71 | J/mol×K | 582.06 | Joback Method |
| cpg | 365.68 | J/mol×K | 612.80 | Joback Method |

# Sources

| | |
|---|---|
| **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=R332600&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 |
| **ripol:** | Polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |