# 4-Ethylcamphor

**Inchi:** InChI=1S/C12H20O/c1-5-12-7-6-11(4,9(13)8-12)10(12,2)3/h5-8H2,1-4H3
**InchiKey:** CKBXFJIWHMQXQW-UHFFFAOYSA-N
**Formula:** C12H20O
**SMILES:** CCC12CCC(C)(C(=O)C1)C2(C)C
**Mol. weight [g/mol]:** 180.29
**CAS:** 90547-83-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| affp | 865.10 | kJ/mol | NIST Webbook |
| basg | 833.30 | kJ/mol | NIST Webbook |
| gf | 12.79 | kJ/mol | Joback Method |
| hf | -263.89 | kJ/mol | Joback Method |
| hfus | 2.69 | kJ/mol | Joback Method |
| hvap | 42.79 | kJ/mol | Joback Method |
| log10ws | -3.19 | | Crippen Method |
| logp | 3.182 | | Crippen Method |
| mcvol | 159.790 | ml/mol | McGowan Method |
| pc | 2635.25 | kPa | Joback Method |
| tb | 555.58 | K | Joback Method |
| tc | 789.43 | K | Joback Method |
| tf | 393.04 | K | Joback Method |
| vc | 0.614 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 418.97 | J/mol×K | 555.58 | Joback Method |
| cpg | 438.16 | J/mol×K | 594.55 | Joback Method |
| cpg | 456.00 | J/mol×K | 633.53 | Joback Method |
| cpg | 472.87 | J/mol×K | 672.50 | Joback Method |
| cpg | 489.14 | J/mol×K | 711.48 | Joback Method |
| cpg | 505.18 | J/mol×K | 750.45 | Joback Method |
| cpg | 521.38 | J/mol×K | 789.43 | 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=C90547834&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **affp:** | Proton affinity |
| **basg:** | Gas basicity |
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |