# Methyl cis-cinnamate

**Inchi:** InChI=1S/C10H10O2/c1-12-10(11)8-7-9-5-3-2-4-6-9/h2-8H,1H3/b8-7+
**InchiKey:** CCRCUPLGCSFEDV-FPLPWBNLSA-N
**Formula:** C10H10O2
**SMILES:** COC(=O)/C=C\c1ccccc1
**Mol. weight [g/mol]:** 162.19

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.4397 | | Cheméo Relay (1.0) |
| hf | -197.71 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 18.69 | kJ/mol | Joback Method |
| hvap | 64.17 | kJ/mol | Cheméo Relay (1.0) |
| ie | 8.79 | eV | Cheméo Relay (1.0) |
| log10ws | -2.58 | | Cheméo Relay (1.0) |
| logp | 1.873 | | Crippen Method |
| mcvol | 131.140 | ml/mol | McGowan Method |
| pc | 3269.04 | kPa | Joback Method |
| rinpol | 1299.00 | | NIST Webbook |
| rinpol | 1303.00 | | NIST Webbook |
| rinpol | 1348.00 | | NIST Webbook |
| rinpol | 1320.00 | | NIST Webbook |
| rinpol | 1321.00 | | NIST Webbook |
| rinpol | 1301.00 | | NIST Webbook |
| rinpol | 1303.00 | | NIST Webbook |
| rinpol | 1321.00 | | NIST Webbook |
| rinpol | 1306.00 | | NIST Webbook |
| rinpol | 1300.00 | | NIST Webbook |
| rinpol | 1306.00 | | NIST Webbook |
| rinpol | 1292.00 | | NIST Webbook |
| rinpol | 1308.20 | | NIST Webbook |
| rinpol | 1301.00 | | NIST Webbook |
| rinpol | 1308.20 | | NIST Webbook |
| rinpol | 1343.00 | | NIST Webbook |
| rinpol | 1300.00 | | NIST Webbook |
| rinpol | 1300.00 | | NIST Webbook |
| rinpol | 1281.00 | | NIST Webbook |
| tb | 520.05 | K | Cheméo Relay (1.0) |

| | | | |
|---|---|---|---|
| tc | 709.57 | K | Cheméo Relay (1.0) |
| tf | 262.81 | K | Cheméo Relay (1.0) |
| vc | 0.458 | m3/kmol | Cheméo Relay (1.0) |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 281.89 | J/mol×K | 535.33 | Joback Method |
| cpg | 294.93 | J/mol×K | 572.44 | Joback Method |
| cpg | 307.12 | J/mol×K | 609.55 | Joback Method |
| cpg | 318.52 | J/mol×K | 646.66 | Joback Method |
| cpg | 329.15 | J/mol×K | 683.77 | Joback Method |
| cpg | 339.04 | J/mol×K | 720.88 | Joback Method |
| cpg | 348.24 | J/mol×K | 757.99 | Joback Method |
| dvisc | 0.0021489 | Pa×s | 295.96 | Joback Method |
| dvisc | 0.0011171 | Pa×s | 335.86 | Joback Method |
| dvisc | 0.0006673 | Pa×s | 375.75 | Joback Method |
| dvisc | 0.0004400 | Pa×s | 415.64 | Joback Method |
| dvisc | 0.0003121 | Pa×s | 455.54 | Joback Method |
| dvisc | 0.0002340 | Pa×s | 495.43 | Joback Method |
| dvisc | 0.0001831 | Pa×s | 535.33 | Joback Method |

# Sources

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Cheméo Relay (1.0):**
**Cheméo Relay (1.0, beta):**
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C19713736&Units=SI

# Legend

**af:** Acentric Factor
**cpg:** Ideal gas heat capacity

| | |
|---|---|
| **dvisc:** | Dynamic viscosity |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **ie:** | Ionization energy |
| **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 |