# 2-Cyclopenten-1-one, 2,3,5-trimethyl

**Other names:** 2,3,5-Trimethyl-2-cyclopenten-1-one
**Inchi:** InChI=1S/C8H12O/c1-5-4-6(2)8(9)7(5)3/h6H,4H2,1-3H3
**InchiKey:** HNZWNWPTJZTRTK-UHFFFAOYSA-N
**Formula:** C8H12O
**SMILES:** CC1=C(C)C(=O)C(C)C1
**Mol. weight [g/mol]:** 124.18

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -58.86 | kJ/mol | Joback Method |
| hf | -250.83 | kJ/mol | Joback Method |
| hfus | 10.37 | kJ/mol | Joback Method |
| hvap | 39.52 | kJ/mol | Joback Method |
| log10ws | -1.96 | | Crippen Method |
| logp | 1.932 | | Crippen Method |
| mcvol | 109.990 | ml/mol | McGowan Method |
| pc | 3210.04 | kPa | Joback Method |
| ripol | 1592.00 | | NIST Webbook |
| ripol | 1592.00 | | NIST Webbook |
| tb | 474.66 | K | Joback Method |
| tc | 691.44 | K | Joback Method |
| tf | 284.84 | K | Joback Method |
| vc | 0.417 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 232.98 | J/mol×K | 474.66 | Joback Method |
| cpg | 246.74 | J/mol×K | 510.79 | Joback Method |
| cpg | 259.97 | J/mol×K | 546.92 | Joback Method |
| cpg | 272.67 | J/mol×K | 583.05 | Joback Method |
| cpg | 284.81 | J/mol×K | 619.18 | Joback Method |
| cpg | 296.41 | J/mol×K | 655.31 | Joback Method |
| cpg | 307.43 | J/mol×K | 691.44 | 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=R242210&Units=SI |

# Legend

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|---|---|
| **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 |