# 2-Propanone, 1-cyclohexylidene-

**Other names:** Cyclohexylideneacetone
1-Cyclohexylidene-2-propanone
**Inchi:** InChI=1S/C9H14O/c1-8(10)7-9-5-3-2-4-6-9/h7H,2-6H2,1H3
**InchiKey:** KVSOBMXTKPYCSG-UHFFFAOYSA-N
**Formula:** C9H14O
**SMILES:** CC(=O)C=C1CCCCC1
**Mol. weight [g/mol]:** 138.21
**CAS:** 874-68-0

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -26.40 | kJ/mol | Joback Method |
| hf | -190.98 | kJ/mol | Joback Method |
| hfus | 11.75 | kJ/mol | Joback Method |
| hvap | 43.90 | kJ/mol | Joback Method |
| log10ws | -2.62 | | Crippen Method |
| logp | 2.466 | | Crippen Method |
| mcvol | 124.080 | ml/mol | McGowan Method |
| pc | 3257.86 | kPa | Joback Method |
| tb | 490.05 | K | Joback Method |
| tc | 708.11 | K | Joback Method |
| tf | 263.10 | K | Joback Method |
| vc | 0.463 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 265.82 | J/mol×K | 490.05 | Joback Method |
| cpg | 281.74 | J/mol×K | 526.39 | Joback Method |
| cpg | 296.74 | J/mol×K | 562.74 | Joback Method |
| cpg | 310.83 | J/mol×K | 599.08 | Joback Method |
| cpg | 324.06 | J/mol×K | 635.42 | Joback Method |
| cpg | 336.46 | J/mol×K | 671.76 | Joback Method |
| cpg | 348.08 | J/mol×K | 708.11 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0048257 | Pa×s | 263.10 | Joback Method |
| dvisc | 0.0021782 | Pa×s | 300.93 | Joback Method |
| dvisc | 0.0011743 | Pa×s | 338.75 | Joback Method |
| dvisc | 0.0007168 | Pa×s | 376.58 | Joback Method |
| dvisc | 0.0004787 | Pa×s | 414.40 | Joback Method |
| dvisc | 0.0003421 | Pa×s | 452.23 | Joback Method |
| dvisc | 0.0002575 | Pa×s | 490.05 | Joback Method |

# Sources

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|---|---|
| **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=C874680&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |