# Cyclohexene, 3-nonyl-

**Other names:** 3-Nonyl-1-cyclohexene
**Inchi:** InChI=1S/C15H28/c1-2-3-4-5-6-7-9-12-15-13-10-8-11-14-15/h10,13,15H,2-9,11-12,14H2
**InchiKey:** XSGZETBAMREIMI-UHFFFAOYSA-N
**Formula:** C15H28
**SMILES:** CCCCCCCCCC1C=CCCC1
**Mol. weight [g/mol]:** 208.38
**CAS:** 15232-79-8

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 129.83 | kJ/mol | Joback Method |
| hf | -240.83 | kJ/mol | Joback Method |
| hfus | 27.66 | kJ/mol | Joback Method |
| hvap | 49.70 | kJ/mol | Joback Method |
| log10ws | -5.61 | | Crippen Method |
| logp | 5.483 | | Crippen Method |
| mcvol | 207.050 | ml/mol | McGowan Method |
| pc | 1711.78 | kPa | Joback Method |
| ripol | 1685.00 | | NIST Webbook |
| ripol | 1723.00 | | NIST Webbook |
| ripol | 1670.00 | | NIST Webbook |
| ripol | 1691.00 | | NIST Webbook |
| ripol | 1697.00 | | NIST Webbook |
| ripol | 1718.00 | | NIST Webbook |
| ripol | 1709.00 | | NIST Webbook |
| ripol | 1691.10 | | NIST Webbook |
| ripol | 1697.30 | | NIST Webbook |
| ripol | 1703.40 | | NIST Webbook |
| ripol | 1709.10 | | NIST Webbook |
| ripol | 1685.00 | | NIST Webbook |
| ripol | 1707.00 | | NIST Webbook |
| ripol | 1703.00 | | NIST Webbook |
| tb | 561.31 | K | Joback Method |
| tc | 748.48 | K | Joback Method |
| tf | 266.95 | K | Joback Method |
| vc | 0.794 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 531.46 | J/mol×K | 561.31 | Joback Method |
| cpg | 627.83 | J/mol×K | 717.29 | Joback Method |
| cpg | 610.52 | J/mol×K | 686.09 | Joback Method |
| cpg | 592.26 | J/mol×K | 654.90 | Joback Method |
| cpg | 573.02 | J/mol×K | 623.70 | Joback Method |
| cpg | 552.76 | J/mol×K | 592.51 | Joback Method |
| cpg | 644.22 | J/mol×K | 748.48 | Joback Method |
| dvisc | 0.0001840 | Pa×s | 561.31 | Joback Method |
| dvisc | 0.0002481 | Pa×s | 512.25 | Joback Method |
| dvisc | 0.0003564 | Pa×s | 463.19 | Joback Method |
| dvisc | 0.0005577 | Pa×s | 414.13 | Joback Method |
| dvisc | 0.0009846 | Pa×s | 365.07 | Joback Method |
| dvisc | 0.0020735 | Pa×s | 316.01 | Joback Method |
| dvisc | 0.0057417 | Pa×s | 266.95 | 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=C15232798&Units=SI

# Legend

**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

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