# Tricyclo[2.2.1.0(2,6)]heptane

| | |
|---|---|
| **Other names:** | Nortricyclane |
| | Nortricyclen |
| | Nortricyclene |
| | Tricyclo[2.2.1.0dimethyl2dimethyl,dimethyl6]heptane |
| | Tricyclo[2.2.1.0^2^,^6]heptane |
| | Tricyclo[2.2.1.0(2.6)]heptane |
| **Inchi:** | InChI=1S/C7H10/c1-4-2-6-5(1)7(6)3-4/h4-7H,1-3H2 |
| **InchiKey:** | BYBGSCXPMGPLFP-UHFFFAOYSA-N |
| **Formula:** | C7H10 |
| **SMILES:** | C1C2CC3C1C3C2 |
| **Mol. weight [g/mol]:** | 94.15 |
| **CAS:** | 279-19-6 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chl | -4207.80 ± 2.20 | kJ/mol | NIST Webbook |
| chl | -4227.10 ± 2.00 | kJ/mol | NIST Webbook |
| chs | -4214.80 ± 1.00 | kJ/mol | NIST Webbook |
| gf | 206.80 | kJ/mol | Joback Method |
| hf | 70.20 ± 1.60 | kJ/mol | NIST Webbook |
| hf | 62.00 ± 2.30 | kJ/mol | NIST Webbook |
| hf | 99.60 | kJ/mol | NIST Webbook |
| hf | 84.50 | kJ/mol | NIST Webbook |
| hf | 82.10 ± 2.10 | kJ/mol | NIST Webbook |
| hf | 78.20 | kJ/mol | NIST Webbook |
| hfl | 43.40 ± 2.00 | kJ/mol | NIST Webbook |
| hfl | 24.00 ± 2.20 | kJ/mol | NIST Webbook |
| hfs | 31.00 ± 1.10 | kJ/mol | NIST Webbook |
| hfus | 13.56 | kJ/mol | Joback Method |
| hsub | 38.70 ± 0.70 | kJ/mol | NIST Webbook |
| hsub | 39.20 ± 1.10 | kJ/mol | NIST Webbook |
| hsub | 39.20 | kJ/mol | NIST Webbook |
| hsub | 39.20 ± 1.10 | kJ/mol | NIST Webbook |
| hvap | 38.00 | kJ/mol | NIST Webbook |
| hvap | 38.00 ± 0.08 | kJ/mol | NIST Webbook |
| hvap | 38.70 ± 0.70 | kJ/mol | NIST Webbook |
| hvap | 38.50 | kJ/mol | NIST Webbook |

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|---|---|---|---|
| hvap | 38.70 | kJ/mol | NIST Webbook |
| ie | 9.37 | eV | NIST Webbook |
| ie | 9.02 | eV | NIST Webbook |
| ie | 9.40 | eV | NIST Webbook |
| ie | 8.92 ± 0.01 | eV | NIST Webbook |
| ie | 8.70 | eV | NIST Webbook |
| log10ws | -1.47 | | Crippen Method |
| logp | 1.662 | | Crippen Method |
| mcvol | 76.910 | ml/mol | McGowan Method |
| pc | 3990.60 | kPa | Joback Method |
| rinpol | 857.00 | | NIST Webbook |
| rinpol | 857.00 | | NIST Webbook |
| tb | 366.57 | K | Joback Method |
| tc | 560.65 | K | Joback Method |
| tf | 225.27 | K | Joback Method |
| vc | 0.314 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 225.81 | J/mol×K | 560.65 | Joback Method |
| cpg | 148.43 | J/mol×K | 366.57 | Joback Method |
| cpg | 215.38 | J/mol×K | 528.30 | Joback Method |
| cpg | 204.06 | J/mol×K | 495.96 | Joback Method |
| cpg | 191.80 | J/mol×K | 463.61 | Joback Method |
| cpg | 178.49 | J/mol×K | 431.26 | Joback Method |
| cpg | 164.06 | J/mol×K | 398.92 | Joback Method |
| cps | 110.20 | J/mol×K | 297.00 | NIST Webbook |
| cps | 129.00 | J/mol×K | 298.15 | NIST Webbook |
| dvisc | 0.0000673 | Pa×s | 225.27 | Joback Method |
| dvisc | 0.0004537 | Pa×s | 343.02 | Joback Method |
| dvisc | 0.0003466 | Pa×s | 319.47 | Joback Method |
| dvisc | 0.0002537 | Pa×s | 295.92 | Joback Method |
| dvisc | 0.0001760 | Pa×s | 272.37 | Joback Method |
| dvisc | 0.0001139 | Pa×s | 248.82 | Joback Method |
| dvisc | 0.0005736 | Pa×s | 366.57 | Joback Method |
| hvapt | 38.30 | kJ/mol | 319.50 | NIST Webbook |

# 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=C279196&Units=SI |

# Legend

| | |
|---|---|
| **chl:** | Standard liquid enthalpy of combustion |
| **chs:** | Standard solid enthalpy of combustion |
| **cpg:** | Ideal gas heat capacity |
| **cps:** | Solid phase heat capacity |
| **dvisc:** | Dynamic viscosity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfl:** | Liquid phase enthalpy of formation at standard conditions |
| **hfs:** | Solid phase enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hsub:** | Enthalpy of sublimation at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **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 |