# trans-anti-trans-Tetra-decahydroanthracene

**Inchi:** InChI=1S/C14H24/c1-2-6-12-10-14-8-4-3-7-13(14)9-11(12)5-1/h11-14H,1-10H2/t11-,12-,
**InchiKey:** GVJFFQYXVOJXFI-AAVRWANBSA-N
**Formula:** C14H24
**SMILES:** C1CCC2CC3CCCCC3CC2C1
**Mol. weight [g/mol]:** 192.34
**CAS:** 28071-99-0

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chs | -8645.70 ± 2.30 | kJ/mol | NIST Webbook |
| gf | 181.04 | kJ/mol | Joback Method |
| hf | -165.03 | kJ/mol | Joback Method |
| hfs | -293.40 ± 2.80 | kJ/mol | NIST Webbook |
| hfus | 16.99 | kJ/mol | Joback Method |
| hsub | 72.70 ± 3.30 | kJ/mol | NIST Webbook |
| hvap | 47.05 | kJ/mol | Joback Method |
| log10ws | -4.40 | | Crippen Method |
| logp | 4.393 | | Crippen Method |
| mcvol | 175.540 | ml/mol | McGowan Method |
| pc | 2311.39 | kPa | Joback Method |
| tb | 556.62 | K | Joback Method |
| tc | 789.03 | K | Joback Method |
| tf | 279.52 | K | Joback Method |
| vc | 0.649 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 476.02 | J/mol×K | 556.62 | Joback Method |
| cpg | 503.38 | J/mol×K | 595.35 | Joback Method |
| cpg | 528.90 | J/mol×K | 634.09 | Joback Method |
| cpg | 552.65 | J/mol×K | 672.82 | Joback Method |
| cpg | 574.73 | J/mol×K | 711.56 | Joback Method |
| cpg | 595.25 | J/mol×K | 750.29 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 614.30 | J/mol×K | 789.03 | Joback Method |
| dvisc | 0.0021240 | Pa×s | 325.70 | Joback Method |
| dvisc | 0.0033535 | Pa×s | 279.52 | Joback Method |
| dvisc | 0.0015068 | Pa×s | 371.89 | Joback Method |
| dvisc | 0.0011532 | Pa×s | 418.07 | Joback Method |
| dvisc | 0.0009308 | Pa×s | 464.25 | Joback Method |
| dvisc | 0.0007810 | Pa×s | 510.44 | Joback Method |
| dvisc | 0.0006747 | Pa×s | 556.62 | Joback Method |
| hsubt | 66.10 | kJ/mol | 291.00 | NIST Webbook |
| hsubt | 72.70 ± 3.30 | kJ/mol | 294.00 | NIST Webbook |

# Sources

**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=C28071990&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

# Legend

**chs:** Standard solid enthalpy of combustion
**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**gf:** Standard Gibbs free energy of formation
**hf:** 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
**hsubt:** Enthalpy of sublimation at a given temperature
**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