# Acanthasterol acetate

**Inchi:** InChI=1S/C32H52O2/c1-19(2)21(4)32(8)18-29(32)20(3)26-11-12-27-25-10-9-23-17-24(3
**InchiKey:** DMAVMYPLZOJVPK-XDSQRMCBSA-N
**Formula:** C32H52O2
**SMILES:** CC(=O)OC1CCC2(C)C(CC=C3C2CCC2(C)C3CCC2C(C)C2CC2(C)C(C)C(C)C)C1
**Mol. weight [g/mol]:** 468.75

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 193.59 | kJ/mol | Joback Method |
| hf | -620.58 | kJ/mol | Joback Method |
| hfus | 37.25 | kJ/mol | Joback Method |
| hvap | 91.51 | kJ/mol | Joback Method |
| log10ws | -8.86 | | Crippen Method |
| logp | 8.451 | | Crippen Method |
| mcvol | 410.580 | ml/mol | McGowan Method |
| pc | 854.46 | kPa | Joback Method |
| rinpol | 3519.00 | | NIST Webbook |
| tb | 1047.76 | K | Joback Method |
| tc | 1289.93 | K | Joback Method |
| tf | 617.68 | K | Joback Method |
| vc | 1.554 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1652.23 | J/mol×K | 1047.76 | Joback Method |
| cpg | 1697.68 | J/mol×K | 1088.12 | Joback Method |
| cpg | 1745.89 | J/mol×K | 1128.48 | Joback Method |
| cpg | 1797.41 | J/mol×K | 1168.84 | Joback Method |
| cpg | 1852.81 | J/mol×K | 1209.20 | Joback Method |
| cpg | 1912.63 | J/mol×K | 1249.57 | Joback Method |
| cpg | 1977.43 | J/mol×K | 1289.93 | 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=R110960&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 |
| **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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |