# Oxandrolone

**Other names:** 2-Oxaandrostan-3-one, 17-hydroxy-17-methyl-, (5«alpha»,17«beta»)-
Anavar
Lonavar
Protivar
Provitar
SC 11585
Vasorome
1H-Benz(e)indene-7-acetic acid, dodecahydro-3-hydroxy-6-(hydroxymethyl)-3,3a,6-trimethyl-, «delta»-lactone
17«beta»-Hydroxy-17-methyl-2-oxa-5«alpha»-androstan-3-one
17-«beta»-hydroxy-17-methyl-2-oxa-androstan-3-one
2-Oxa-5«alpha»-androstan-3-one, 17«beta»-hydroxy-17-methyl-
8075 C. B.
17«beta»-Hydroxy-17«alpha»-methyl-2-oxa-5«alpha»-androstan-3-one
NSC-67068
8075CB
Oxandrin
7-Hydroxy-4a,6a,7-trimethyltetradecahydroindeno[4,5-H]isochromen-2(1H)-one

**Inchi:** InChI=1S/C19H30O3/c1-17-11-22-16(20)10-12(17)4-5-13-14(17)6-8-18(2)15(13)7-9-19(1

**InchiKey:** QSLJIVKCVHQPLV-WPMSWULFSA-N

**Formula:** C19H30O3

**SMILES:** CC12COC(=O)CC1CCC1C2CCC2(C)C1CCC2(C)O

**Mol. weight [g/mol]:** 306.44

**CAS:** 53-39-4

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -93.53 | kJ/mol | Joback Method |
| hf | -612.32 | kJ/mol | Joback Method |
| hfus | 22.90 | kJ/mol | Joback Method |
| hvap | 79.46 | kJ/mol | Joback Method |
| log10ws | -4.14 | | Crippen Method |
| logp | 3.543 | | Crippen Method |
| mcvol | 248.440 | ml/mol | McGowan Method |
| pc | 1987.66 | kPa | Joback Method |
| rinpol | 2844.80 | | NIST Webbook |
| rinpol | 2844.80 | | NIST Webbook |
| tb | 856.09 | K | Joback Method |

| | | | |
|---|---|---|---|
| tc | 1094.71 | K | Joback Method |
| tf | 572.64 | K | Joback Method |
| vc | 0.925 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 904.02 | J/mol×K | 856.09 | Joback Method |
| cpg | 931.03 | J/mol×K | 895.86 | Joback Method |
| cpg | 958.84 | J/mol×K | 935.63 | Joback Method |
| cpg | 987.90 | J/mol×K | 975.40 | Joback Method |
| cpg | 1018.64 | J/mol×K | 1015.17 | Joback Method |
| cpg | 1051.50 | J/mol×K | 1054.94 | Joback Method |
| cpg | 1086.93 | J/mol×K | 1094.71 | Joback Method |

# 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=C53394&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

# Legend

**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 |