

# 3Beta-acetoxy-17beta-hydroxy-5alpha-androstan-3-one acid lactone

InChI: InChI=1S/C23H34O4/c1-13(24)26-16-6-8-22(2)15(12-16)4-5-17-18(22)7-9-23(3)19(17)10  
InChIKey: PAONJAURFWGCAT-UHFFFAOYSA-N  
Formula: C23H34O4  
SMILES: CC(=O)OC1CCC2(C)C(CCC3C2CCC2(C)C3CC3CC(=O)OC32)C1  
Mol. weight [g/mol]: 374.51  
CAS: 125567-32-0

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -98.42  | kJ/mol  | Joback Method  |
| hf            | -750.23 | kJ/mol  | Joback Method  |
| hfus          | 37.46   | kJ/mol  | Joback Method  |
| hvap          | 81.59   | kJ/mol  | Joback Method  |
| log10ws       | -5.18   |         | Crippen Method |
| logp          | 4.502   |         | Crippen Method |
| mcvol         | 295.510 | ml/mol  | McGowan Method |
| pc            | 1455.68 | kPa     | Joback Method  |
| tb            | 933.55  | K       | Joback Method  |
| tc            | 1181.55 | K       | Joback Method  |
| tf            | 618.86  | K       | Joback Method  |
| vc            | 1.113   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value   | Unit    | Temperature [K] | Source        |
|---------------|---------|---------|-----------------|---------------|
| cpg           | 1133.12 | J/mol×K | 933.55          | Joback Method |
| cpg           | 1162.79 | J/mol×K | 974.88          | Joback Method |
| cpg           | 1192.81 | J/mol×K | 1016.22         | Joback Method |
| cpg           | 1223.56 | J/mol×K | 1057.55         | Joback Method |
| cpg           | 1255.42 | J/mol×K | 1098.88         | Joback Method |
| cpg           | 1288.78 | J/mol×K | 1140.22         | Joback Method |
| cpg           | 1324.02 | J/mol×K | 1181.55         | Joback Method |

# Sources

|                        |                                                                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                           |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                           |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C125567320&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C125567320&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                       |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                               |

## Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

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