# E-14-Octadecen-1-ol acetate

**Other names:** (E)-15-Octadecen-1-ol acetate
**Inchi:** InChI=1S/C20H38O2/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-22-20(2)21/h5-6H
**InchiKey:** ITDZQIVDSQUQBX-AATRIKPKSA-N
**Formula:** C20H38O2
**SMILES:** CCCC=CCCCCCCCCCCCCCOC(C)=O
**Mol. weight [g/mol]:** 310.51

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -36.18 | kJ/mol | Joback Method |
| hf | -583.71 | kJ/mol | Joback Method |
| hfus | 50.54 | kJ/mol | Joback Method |
| hvap | 69.23 | kJ/mol | Joback Method |
| log10ws | -6.91 | | Crippen Method |
| logp | 6.587 | | Crippen Method |
| mcvol | 295.800 | ml/mol | McGowan Method |
| pc | 1082.06 | kPa | Joback Method |
| rinpol | 2197.00 | | NIST Webbook |
| rinpol | 2197.00 | | NIST Webbook |
| ripol | 2054.00 | | NIST Webbook |
| ripol | 2054.00 | | NIST Webbook |
| tb | 737.45 | K | Joback Method |
| tc | 911.93 | K | Joback Method |
| tf | 382.24 | K | Joback Method |
| vc | 1.159 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 885.45 | J/mol×K | 737.45 | Joback Method |
| cpg | 904.58 | J/mol×K | 766.53 | Joback Method |
| cpg | 922.81 | J/mol×K | 795.61 | Joback Method |
| cpg | 940.17 | J/mol×K | 824.69 | Joback Method |
| cpg | 956.69 | J/mol×K | 853.77 | Joback Method |

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|---|---|---|---|---|
| cpg | 972.40 | J/mol×K | 882.85 | Joback Method |
| cpg | 987.32 | J/mol×K | 911.93 | Joback Method |
| dvisc | 0.0015546 | Pa×s | 382.24 | Joback Method |
| dvisc | 0.0006381 | Pa×s | 441.44 | Joback Method |
| dvisc | 0.0003233 | Pa×s | 500.64 | Joback Method |
| dvisc | 0.0001891 | Pa×s | 559.84 | Joback Method |
| dvisc | 0.0001226 | Pa×s | 619.05 | Joback Method |
| dvisc | 0.0000857 | Pa×s | 678.25 | Joback Method |
| dvisc | 0.0000635 | Pa×s | 737.45 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U130940&Units=SI |
| **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 |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **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 |
| **ripol:** | Polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |

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