# Methyl Z-11-tetradecenoate

**Inchi:** InChI=1S/C15H28O2/c1-3-4-5-6-7-8-9-10-11-12-13-14-15(16)17-2/h4-5H,3,6-14H2,1-2H
**InchiKey:** BDWJRABOFNWETH-PLNGDYQASA-N
**Formula:** C15H28O2
**SMILES:** CCC=CCCCCCCCCCC(=O)OC
**Mol. weight [g/mol]:** 240.38

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -78.28 | kJ/mol | Joback Method |
| hf | -480.51 | kJ/mol | Joback Method |
| hfus | 37.59 | kJ/mol | Joback Method |
| hvap | 58.10 | kJ/mol | Joback Method |
| log10ws | -4.82 | | Crippen Method |
| logp | 4.636 | | Crippen Method |
| mcvol | 225.350 | ml/mol | McGowan Method |
| pc | 1525.88 | kPa | Joback Method |
| rinpol | 2001.00 | | NIST Webbook |
| rinpol | 2001.00 | | NIST Webbook |
| tb | 623.05 | K | Joback Method |
| tc | 796.03 | K | Joback Method |
| tf | 325.89 | K | Joback Method |
| vc | 0.879 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 600.59 | J/mol×K | 623.05 | Joback Method |
| cpg | 617.60 | J/mol×K | 651.88 | Joback Method |
| cpg | 633.86 | J/mol×K | 680.71 | Joback Method |
| cpg | 649.40 | J/mol×K | 709.54 | Joback Method |
| cpg | 664.23 | J/mol×K | 738.37 | Joback Method |
| cpg | 678.37 | J/mol×K | 767.20 | Joback Method |
| cpg | 691.85 | J/mol×K | 796.03 | Joback Method |
| dvisc | 0.0024199 | Pa×s | 325.89 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0010480 | Pa×s | 375.42 | Joback Method |
| dvisc | 0.0005516 | Pa×s | 424.94 | Joback Method |
| dvisc | 0.0003319 | Pa×s | 474.47 | Joback Method |
| dvisc | 0.0002199 | Pa×s | 524.00 | Joback Method |
| dvisc | 0.0001564 | Pa×s | 573.52 | Joback Method |
| dvisc | 0.0001174 | Pa×s | 623.05 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U130828&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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |