# 9-Decenoic acid, 4,4-dimethyloxazoline (dmox) derivative

**Inchi:** InChI=1S/C14H25NO/c1-4-5-6-7-8-9-10-11-13-15-14(2,3)12-16-13/h4H,1,5-12H2,2-3H3
**InchiKey:** WCWKMKCASOICGI-UHFFFAOYSA-N
**Formula:** C14H25NO
**SMILES:** C=CCCCCCCCC1=NC(C)(C)CO1
**Mol. weight [g/mol]:** 223.35

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 236.89 | kJ/mol | Joback Method |
| hf | -145.86 | kJ/mol | Joback Method |
| hfus | 32.32 | kJ/mol | Joback Method |
| hvap | 56.87 | kJ/mol | Joback Method |
| log10ws | -4.29 | | Crippen Method |
| logp | 4.110 | | Crippen Method |
| mcvol | 204.510 | ml/mol | McGowan Method |
| pc | 1920.30 | kPa | Joback Method |
| rinpol | 1512.30 | | NIST Webbook |
| rinpol | 1512.30 | | NIST Webbook |
| tb | 616.71 | K | Joback Method |
| tc | 818.13 | K | Joback Method |
| tf | 391.97 | K | Joback Method |
| vc | 0.795 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 564.47 | J/mol×K | 616.71 | Joback Method |
| cpg | 583.68 | J/mol×K | 650.28 | Joback Method |
| cpg | 601.90 | J/mol×K | 683.85 | Joback Method |
| cpg | 619.25 | J/mol×K | 717.42 | Joback Method |
| cpg | 635.82 | J/mol×K | 750.99 | Joback Method |
| cpg | 651.69 | J/mol×K | 784.56 | Joback Method |
| cpg | 666.97 | J/mol×K | 818.13 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U333578&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |