# 1-Naphthaleneacetic acid, dodec-2-en-1-yl ester

**Inchi:** InChI=1S/C24H32O2/c1-2-3-4-5-6-7-8-9-10-13-19-26-24(25)20-22-17-14-16-21-15-11-12

**InchiKey:** VDOWMGZFPJFJLK-JLHYYAGUSA-N

**Formula:** C24H32O2

**SMILES:** CCCCCCCCCC=CCOC(=O)Cc1cccc2ccccc12

**Mol. weight [g/mol]:** 352.51

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 206.93 | kJ/mol | Joback Method |
| hf | -250.14 | kJ/mol | Joback Method |
| hfus | 51.58 | kJ/mol | Joback Method |
| hvap | 82.71 | kJ/mol | Joback Method |
| log10ws | -7.82 | | Crippen Method |
| logp | 6.622 | | Crippen Method |
| mcvol | 308.940 | ml/mol | McGowan Method |
| pc | 1219.99 | kPa | Joback Method |
| rinpol | 1522.00 | | NIST Webbook |
| rinpol | 1522.00 | | NIST Webbook |
| tb | 879.61 | K | Joback Method |
| tc | 1089.83 | K | Joback Method |
| tf | 498.96 | K | Joback Method |
| vc | 1.198 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 966.83 | J/mol×K | 879.61 | Joback Method |
| cpg | 984.07 | J/mol×K | 914.65 | Joback Method |
| cpg | 1000.32 | J/mol×K | 949.68 | Joback Method |
| cpg | 1015.67 | J/mol×K | 984.72 | Joback Method |
| cpg | 1030.20 | J/mol×K | 1019.76 | Joback Method |
| cpg | 1043.99 | J/mol×K | 1054.80 | Joback Method |
| cpg | 1057.15 | J/mol×K | 1089.83 | Joback Method |
| dvisc | 0.0007214 | Pa×s | 498.96 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004008 | Pa×s | 562.40 | Joback Method |
| dvisc | 0.0002509 | Pa×s | 625.84 | Joback Method |
| dvisc | 0.0001712 | Pa×s | 689.28 | Joback Method |
| dvisc | 0.0001246 | Pa×s | 752.73 | Joback Method |
| dvisc | 0.0000952 | Pa×s | 816.17 | Joback Method |
| dvisc | 0.0000757 | Pa×s | 879.61 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U415055&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

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|---|---|
| **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 |