# p-Nitrophenyl nonyl ether

**Other names:** Benzene, 1-nitro-4-(nonyloxy)-
4-Nitrophenyl nonyl ether
**Inchi:** InChI=1S/C15H23NO3/c1-2-3-4-5-6-7-8-13-19-15-11-9-14(10-12-15)16(17)18/h9-12H,2-
**InchiKey:** JLSCIQUWVGKSDH-UHFFFAOYSA-N
**Formula:** C15H23NO3
**SMILES:** CCCCCCCCCOc1ccc([N+](=O)[O-])cc1
**Mol. weight [g/mol]:** 265.35
**CAS:** 86702-46-7

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 108.75 | kJ/mol | Joback Method |
| hf | -270.85 | kJ/mol | Joback Method |
| hfus | 40.81 | kJ/mol | Joback Method |
| hvap | 70.92 | kJ/mol | Joback Method |
| log10ws | -5.59 | | Crippen Method |
| logp | 4.724 | | Crippen Method |
| mcvol | 221.740 | ml/mol | McGowan Method |
| pc | 1815.41 | kPa | Joback Method |
| tb | 748.52 | K | Joback Method |
| tc | 961.29 | K | Joback Method |
| tf | 463.59 | K | Joback Method |
| vc | 0.868 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 643.84 | J/mol×K | 748.52 | Joback Method |
| cpg | 659.85 | J/mol×K | 783.98 | Joback Method |
| cpg | 674.83 | J/mol×K | 819.44 | Joback Method |
| cpg | 688.81 | J/mol×K | 854.90 | Joback Method |
| cpg | 701.82 | J/mol×K | 890.36 | Joback Method |
| cpg | 713.91 | J/mol×K | 925.83 | Joback Method |
| cpg | 725.11 | J/mol×K | 961.29 | Joback Method |

# Pressure Dependent Properties

| Property code | Value | Unit | Pressure [kPa] | Source |
|---|---|---|---|---|
| tbrp | 450.00 ± 1.00 | K | 0.70 | NIST Webbook |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C86702467&Units=SI |

# Legend

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|---|---|
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tbrp:** | Boiling point at reduced pressure |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |