# Propylamine, 3,3'-(2,2-dimethyl trimethylenedioxy)bis-

**Other names:** 3,3'-[(2,2-dimethylpropane-1,3-diyl)bis(oxy)]bispropylamine
**Inchi:** InChI=1S/C11H26N2O2/c1-11(2,9-14-7-3-5-12)10-15-8-4-6-13/h3-10,12-13H2,1-2H3
**InchiKey:** USNBVHYUYWSPNK-UHFFFAOYSA-N
**Formula:** C11H26N2O2
**SMILES:** CC(C)(COCCCN)COCCCN
**Mol. weight [g/mol]:** 218.34
**CAS:** 6921-05-7

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -32.52 | kJ/mol | Joback Method |
| hf | -475.98 | kJ/mol | Joback Method |
| hfus | 29.60 | kJ/mol | Joback Method |
| hvap | 64.89 | kJ/mol | Joback Method |
| log10ws | -1.23 | | Crippen Method |
| logp | 0.743 | | Crippen Method |
| mcvol | 197.550 | ml/mol | McGowan Method |
| pc | 2113.89 | kPa | Joback Method |
| tb | 637.75 | K | Joback Method |
| tc | 827.25 | K | Joback Method |
| tf | 427.13 | K | Joback Method |
| vc | 0.735 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 558.25 | J/mol×K | 637.75 | Joback Method |
| cpg | 574.25 | J/mol×K | 669.33 | Joback Method |
| cpg | 589.44 | J/mol×K | 700.92 | Joback Method |
| cpg | 603.85 | J/mol×K | 732.50 | Joback Method |
| cpg | 617.50 | J/mol×K | 764.09 | Joback Method |
| cpg | 630.40 | J/mol×K | 795.67 | Joback Method |
| cpg | 642.58 | J/mol×K | 827.25 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C6921057&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 |
| **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 |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |