# 2,3-Dibromopropyl alcohol

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|---|---|
| **Other names:** | 1-Propanol, 2,3-dibromo- |
| | 1,2-Dibromopropan-3-ol |
| | 2,3-Dibromo-1-propanol |
| | 2,3-Dibromopropanol |
| | 1,2-Dibromohydrin |
| | Brominex 257 |
| | NCI-C55436 |
| | USAF DO-42 |
| | DBP |
| | «beta»-Dibromohydrin |
| | DBP (flame retardant) |
| | NSC 6203 |
| | 2,3-dibromopropan-1-ol |
| **Inchi:** | InChI=1S/C3H6Br2O/c4-1-3(5)2-6/h3,6H,1-2H2 |
| **InchiKey:** | QWVCIORZLNBIIC-UHFFFAOYSA-N |
| **Formula:** | C3H6Br2O |
| **SMILES:** | OCC(Br)CBr |
| **Mol. weight [g/mol]:** | 217.89 |
| **CAS:** | 96-13-9 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -136.24 | kJ/mol | Joback Method |
| hf | -210.10 | kJ/mol | Joback Method |
| hfus | 14.66 | kJ/mol | Joback Method |
| hvap | 51.43 | kJ/mol | Joback Method |
| log10ws | -1.32 | | Crippen Method |
| logp | 1.137 | | Crippen Method |
| mcvol | 94.000 | ml/mol | McGowan Method |
| pc | 6219.59 | kPa | Joback Method |
| rinpol | 1079.00 | | NIST Webbook |
| rinpol | 1079.00 | | NIST Webbook |
| tb | 492.10 | K | Joback Method |
| tc | 693.60 | K | Joback Method |
| tf | 288.99 | K | Joback Method |
| vc | 0.341 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 155.18 | J/mol×K | 492.10 | Joback Method |
| cpg | 160.65 | J/mol×K | 525.68 | Joback Method |
| cpg | 165.78 | J/mol×K | 559.27 | Joback Method |
| cpg | 170.57 | J/mol×K | 592.85 | Joback Method |
| cpg | 175.07 | J/mol×K | 626.43 | Joback Method |
| cpg | 179.28 | J/mol×K | 660.02 | Joback Method |
| cpg | 183.24 | J/mol×K | 693.60 | Joback Method |
| dvisc | 0.0172793 | Pa×s | 288.99 | Joback Method |
| dvisc | 0.0059899 | Pa×s | 322.84 | Joback Method |
| dvisc | 0.0025389 | Pa×s | 356.69 | Joback Method |
| dvisc | 0.0012488 | Pa×s | 390.55 | Joback Method |
| dvisc | 0.0006879 | Pa×s | 424.40 | Joback Method |
| dvisc | 0.0004138 | Pa×s | 458.25 | Joback Method |
| dvisc | 0.0002669 | Pa×s | 492.10 | Joback Method |
| hvapt | 57.30 | kJ/mol | 411.00 | NIST Webbook |

# Pressure Dependent Properties

| Property code | Value | Unit | Pressure [kPa] | Source |
|---|---|---|---|---|
| tbrp | 369.20 | K | 1.30 | NIST Webbook |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C96139&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

# 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 |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **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 |
| **tbrp:** | Boiling point at reduced pressure |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |