# Benzene, 1,2-dibromo-4,5-dimethyl-

**Other names:** 4,5-Dibromo-o-xylene
**Inchi:** InChI=1S/C8H8Br2/c1-5-3-7(9)8(10)4-6(5)2/h3-4H,1-2H3
**InchiKey:** BCIDDURGCAHERU-UHFFFAOYSA-N
**Formula:** C8H8Br2
**SMILES:** Cc1cc(Br)c(Br)cc1C
**Mol. weight [g/mol]:** 263.96
**CAS:** 24932-48-7

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 128.64 | kJ/mol | Joback Method |
| hf | 46.33 | kJ/mol | Joback Method |
| hfus | 19.92 | kJ/mol | Joback Method |
| hvap | 50.53 | kJ/mol | Joback Method |
| log10ws | -4.75 | | Crippen Method |
| logp | 3.828 | | Crippen Method |
| mcvol | 134.820 | ml/mol | McGowan Method |
| pc | 4098.62 | kPa | Joback Method |
| tb | 551.20 | K | NIST Webbook |
| tc | 804.69 | K | Joback Method |
| tf | 363.50 | K | Joback Method |
| vc | 0.499 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 244.05 | J/mol×K | 556.38 | Joback Method |
| cpg | 254.08 | J/mol×K | 597.77 | Joback Method |
| cpg | 263.42 | J/mol×K | 639.15 | Joback Method |
| cpg | 272.13 | J/mol×K | 680.54 | Joback Method |
| cpg | 280.23 | J/mol×K | 721.92 | Joback Method |
| cpg | 287.79 | J/mol×K | 763.31 | Joback Method |
| cpg | 294.83 | J/mol×K | 804.69 | Joback Method |
| dvisc | 0.0011896 | Pa×s | 363.50 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0008483 | Pa×s | 395.65 | Joback Method |
| dvisc | 0.0006364 | Pa×s | 427.79 | Joback Method |
| dvisc | 0.0004971 | Pa×s | 459.94 | Joback Method |
| dvisc | 0.0004009 | Pa×s | 492.09 | Joback Method |
| dvisc | 0.0003320 | Pa×s | 524.23 | Joback Method |
| dvisc | 0.0002810 | Pa×s | 556.38 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C24932487&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

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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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |