# Benzene, 1,3-dichloro-5-(chloromethyl)-

**Inchi:** InChI=1S/C7H5Cl3/c8-4-5-1-6(9)3-7(10)2-5/h1-3H,4H2
**InchiKey:** ZFLRKAMKGYNFPH-UHFFFAOYSA-N
**Formula:** C7H5Cl3
**SMILES:** ClCc1cc(Cl)cc(Cl)c1
**Mol. weight [g/mol]:** 195.47
**CAS:** 3290-06-0

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 65.42 | kJ/mol | Joback Method |
| hf | -21.44 | kJ/mol | Joback Method |
| hfus | 19.74 | kJ/mol | Joback Method |
| hvap | 47.93 | kJ/mol | Joback Method |
| log10ws | -3.87 | | Crippen Method |
| logp | 3.732 | | Crippen Method |
| mcvol | 122.450 | ml/mol | McGowan Method |
| pc | 3460.21 | kPa | Joback Method |
| tb | 508.49 | K | Joback Method |
| tc | 743.54 | K | Joback Method |
| tf | 309.87 | K | Joback Method |
| vc | 0.467 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 208.02 | J/mol×K | 508.49 | Joback Method |
| cpg | 216.67 | J/mol×K | 547.67 | Joback Method |
| cpg | 224.73 | J/mol×K | 586.84 | Joback Method |
| cpg | 232.23 | J/mol×K | 626.02 | Joback Method |
| cpg | 239.19 | J/mol×K | 665.19 | Joback Method |
| cpg | 245.65 | J/mol×K | 704.37 | Joback Method |
| cpg | 251.62 | J/mol×K | 743.54 | Joback Method |
| dvisc | 0.0017070 | Pa×s | 309.87 | Joback Method |
| dvisc | 0.0010988 | Pa×s | 342.97 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0007643 | Pa×s | 376.08 | Joback Method |
| dvisc | 0.0005638 | Pa×s | 409.18 | Joback Method |
| dvisc | 0.0004353 | Pa×s | 442.28 | Joback Method |
| dvisc | 0.0003484 | Pa×s | 475.39 | Joback Method |
| dvisc | 0.0002870 | Pa×s | 508.49 | Joback Method |

# 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=C3290060&Units=SI |

# 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 |
| **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 |

Latest version available from:

https://www.chemeo.com/cid/22-670-3/Benzene-1-3-dichloro-5-chloromethyl.pdf

Generated by Cheméo on 2024-10-12 02:43:45.957911733 +0000 UTC m=+3281888.594880982.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.