# 3,8-dichlorodecane

**Inchi:** InChI=1S/C10H20Cl2/c1-3-9(11)7-5-6-8-10(12)4-2/h9-10H,3-8H2,1-2H3
**InchiKey:** PKUMUNYJGYMMGK-UHFFFAOYSA-N
**Formula:** C10H20Cl2
**SMILES:** CCC(Cl)CCCCC(Cl)CC
**Mol. weight [g/mol]:** 211.17

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 4.58 | kJ/mol | Joback Method |
| hf | -291.77 | kJ/mol | Joback Method |
| hfus | 23.00 | kJ/mol | Joback Method |
| hvap | 45.85 | kJ/mol | Joback Method |
| log10ws | -4.54 | | Crippen Method |
| logp | 4.582 | | Crippen Method |
| mcvol | 176.240 | ml/mol | McGowan Method |
| pc | 2000.12 | kPa | Joback Method |
| ripol | 1752.00 | | NIST Webbook |
| ripol | 1748.00 | | NIST Webbook |
| ripol | 1748.00 | | NIST Webbook |
| ripol | 1752.00 | | NIST Webbook |
| tb | 502.18 | K | Joback Method |
| tc | 683.82 | K | Joback Method |
| tf | 232.30 | K | Joback Method |
| vc | 0.681 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 380.69 | J/mol×K | 502.18 | Joback Method |
| cpg | 395.59 | J/mol×K | 532.45 | Joback Method |
| cpg | 409.82 | J/mol×K | 562.73 | Joback Method |
| cpg | 423.40 | J/mol×K | 593.00 | Joback Method |
| cpg | 436.35 | J/mol×K | 623.27 | Joback Method |
| cpg | 448.68 | J/mol×K | 653.54 | Joback Method |

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|---|---|---|---|---|
| cpg | 460.42 | J/mol×K | 683.82 | Joback Method |
| dvisc | 0.0106207 | Pa×s | 232.30 | Joback Method |
| dvisc | 0.0033082 | Pa×s | 277.28 | Joback Method |
| dvisc | 0.0014270 | Pa×s | 322.26 | Joback Method |
| dvisc | 0.0007564 | Pa×s | 367.24 | Joback Method |
| dvisc | 0.0004605 | Pa×s | 412.22 | Joback Method |
| dvisc | 0.0003091 | Pa×s | 457.20 | Joback Method |
| dvisc | 0.0002228 | Pa×s | 502.18 | Joback Method |

# Sources

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|---|---|
| **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=R295759&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# 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 |
| **ripol:** | Polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |

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