

# Cyclohexene, 4-bromo-

|                             |  |
|-----------------------------|--|
| <b>Other names:</b>         | 4-Bromo-1-cyclohexene                          |
| <b>Inchi:</b>               | InChI=1S/C6H9Br/c7-6-4-2-1-3-5-6/h1-2,6H,3-5H2 |
| <b>InchiKey:</b>            | IDYIRPALXVSDCK-UHFFFAOYSA-N                    |
| <b>Formula:</b>             | C6H9Br   |
| <b>SMILES:</b>              | BrC1CC=CCC1                                    |
| <b>Mol. weight [g/mol]:</b> | 161.04   |
| <b>CAS:</b>                 | 3540-84-9                                      |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | 68.37   | kJ/mol               | Joback Method  |
| hf            | -28.74  | kJ/mol               | Joback Method  |
| hfus          | 9.64    | kJ/mol               | Joback Method  |
| hvap          | 36.11   | kJ/mol               | Joback Method  |
| log10ws       | -2.63   |                      | Crippen Method |
| logp          | 2.490   |                      | Crippen Method |
| mcvol         | 97.740  | ml/mol               | McGowan Method |
| pc            | 4540.80 | kPa                  | Joback Method  |
| rinpol        | 974.00  |                      | NIST Webbook   |
| rinpol        | 974.00  |                      | NIST Webbook   |
| rinpol        | 969.00  |                      | NIST Webbook   |
| rinpol        | 969.00  |                      | NIST Webbook   |
| rinpol        | 974.00  |                      | NIST Webbook   |
| tb            | 421.55  | K                    | Joback Method  |
| tc            | 650.33  | K                    | Joback Method  |
| tf            | 225.32  | K                    | Joback Method  |
| vc            | 0.352   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 163.16 | J/molxK | 421.55          | Joback Method |
| cpg           | 176.55 | J/molxK | 459.68          | Joback Method |
| cpg           | 189.10 | J/molxK | 497.81          | Joback Method |

|       |           |         |        |               |
|-------|-----------|---------|--------|---------------|
| cpg   | 200.82    | J/molxK | 535.94 | Joback Method |
| cpg   | 211.77    | J/molxK | 574.07 | Joback Method |
| cpg   | 221.97    | J/molxK | 612.20 | Joback Method |
| cpg   | 231.47    | J/molxK | 650.33 | Joback Method |
| dvisc | 0.0043841 | Paxs    | 225.32 | Joback Method |
| dvisc | 0.0022463 | Paxs    | 258.02 | Joback Method |
| dvisc | 0.0013378 | Paxs    | 290.73 | Joback Method |
| dvisc | 0.0008848 | Paxs    | 323.43 | Joback Method |
| dvisc | 0.0006314 | Paxs    | 356.14 | Joback Method |
| dvisc | 0.0004768 | Paxs    | 388.84 | Joback Method |
| dvisc | 0.0003761 | Paxs    | 421.55 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                       |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                       |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C3540849&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C3540849&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                   |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                           |

## Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

Latest version available from:

<https://www.chemeo.com/cid/61-284-9/Cyclohexene-4-bromo.pdf>

Generated by Cheméo on 2024-04-17 17:19:03.084916768 +0000 UTC m=+15663592.005494080.

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