

# CH<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>

**Inchi:** InChI=1S/C3H8N/c1-4(2)3/h1H2,2-3H3  
**InchiKey:** VMWJCF LUSKZZDX-UHFFFAOYSA-N  
**Formula:** C<sub>3</sub>H<sub>8</sub>N  
**SMILES:** [CH<sub>2</sub>]N(C)C  
**Mol. weight [g/mol]:** 58.10  
**CAS:** 30208-47-0

## Physical Properties

| Property code | Value        | Unit                 | Source         |
|---------------|--------------|----------------------|----------------|
| ea            | -0.12 ± 0.07 | eV                   | NIST Webbook   |
| gf            | 137.54       | kJ/mol               | Joback Method  |
| hf            | 18.09        | kJ/mol               | Joback Method  |
| hfpi          | 661.00       | kJ/mol               | NIST Webbook   |
| hfus          | 8.23         | kJ/mol               | Joback Method  |
| hvap          | 24.17        | kJ/mol               | Joback Method  |
| ie            | 5.70         | eV                   | NIST Webbook   |
| ie            | 5.35         | eV                   | NIST Webbook   |
| ie            | 5.70         | eV                   | NIST Webbook   |
| log10ws       | 0.25         |                      | Crippen Method |
| logp          | 0.340        |                      | Crippen Method |
| mvol          | 60.960       | ml/mol               | McGowan Method |
| pc            | 4665.71      | kPa                  | Joback Method  |
| tb            | 279.78       | K                    | Joback Method  |
| tc            | 436.02       | K                    | Joback Method  |
| tf            | 172.41       | K                    | Joback Method  |
| vc            | 0.212        | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 81.16  | J/mol×K | 279.78          | Joback Method |
| cpg           | 88.73  | J/mol×K | 305.82          | Joback Method |
| cpg           | 95.89  | J/mol×K | 331.86          | Joback Method |
| cpg           | 102.65 | J/mol×K | 357.90          | Joback Method |

|     |        |         |        |               |
|-----|--------|---------|--------|---------------|
| cpg | 109.04 | J/mol×K | 383.94 | Joback Method |
| cpg | 115.08 | J/mol×K | 409.98 | Joback Method |
| cpg | 120.77 | J/mol×K | 436.02 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C30208470&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C30208470&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                     |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                             |
| <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>                         |

## Legend

|                 |  |
|-----------------|--|
| <b>cpg:</b>     | Ideal gas heat capacity                                      |
| <b>ea:</b>      | Electron affinity  |
| <b>gf:</b>      | Standard Gibbs free energy of formation                      |
| <b>hf:</b>      | Enthalpy of formation at standard conditions                 |
| <b>hfpi:</b>    | Enthalpy of formation of positive ion at standard conditions |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions                    |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions              |
| <b>ie:</b>      | Ionization energy  |
| <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>tb:</b>      | Normal Boiling Point Temperature                             |
| <b>tc:</b>      | Critical Temperature   |
| <b>tf:</b>      | Normal melting (fusion) point                                |
| <b>vc:</b>      | Critical Volume  |

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