

# Cyclopropanecarbonitrile, 1-(p-chlorophenyl)-2-(p-methoxyphenyl)-

|                      |  |
|----------------------|--|
| Inchi:               | InChI=1S/C17H14ClNO/c1-20-15-8-2-12(3-9-15)16-10-17(16,11-19)13-4-6-14(18)7-5-13 |
| InchiKey:            | UKBFLNJUMCRGX-UHFFFAOYSA-N   |
| Formula:             | C17H14ClNO   |
| SMILES:              | COc1ccc(C2CC2(C#N)c2ccc(Cl)cc2)cc1   |
| Mol. weight [g/mol]: | 283.75   |
| CAS:                 | 32589-54-1   |

## Physical Properties

| Property code | Value       | Unit                 | Source         |
|---------------|-------------|----------------------|----------------|
| gf            | 361.62      | kJ/mol               | Joback Method  |
| hf            | 140.53      | kJ/mol               | Joback Method  |
| hfus          | 26.89       | kJ/mol               | Joback Method  |
| hvap          | 75.04       | kJ/mol               | Joback Method  |
| ie            | 7.70 ± 0.05 | eV                   | NIST Webbook   |
| log10ws       | -4.93       |                      | Crippen Method |
| logp          | 4.297       |                      | Crippen Method |
| mcvol         | 211.500     | ml/mol               | McGowan Method |
| pc            | 2153.30     | kPa                  | Joback Method  |
| tb            | 815.92      | K                    | Joback Method  |
| tc            | 1076.27     | K                    | Joback Method  |
| tf            | 513.97      | K                    | Joback Method  |
| vc            | 0.819       | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 585.97 | J/mol×K | 815.92          | Joback Method |
| cpg           | 601.38 | J/mol×K | 859.31          | Joback Method |
| cpg           | 616.43 | J/mol×K | 902.70          | Joback Method |
| cpg           | 631.39 | J/mol×K | 946.10          | Joback Method |
| cpg           | 646.51 | J/mol×K | 989.49          | Joback Method |
| cpg           | 662.02 | J/mol×K | 1032.88         | Joback Method |
| cpg           | 678.19 | J/mol×K | 1076.27         | 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=C32589541&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C32589541&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>                                     |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>                             |

# Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <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>h vap:</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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