

# o-Nitrobenzylidene-5,6,7,8-tetrahydronaphthyl-2-a

|                             |  |
|-----------------------------|--|
| <b>Inchi:</b>               | InChI=1S/C19H16N2O2/c20-13-18(12-17-7-3-4-8-19(17)21(22)23)16-10-9-14-5-1-2-6-15 |
| <b>InchiKey:</b>            | KNJQLLOVNUGNDQ-LDADJPATSA-N  |
| <b>Formula:</b>             | C19H16N2O2   |
| <b>SMILES:</b>              | N#CC(=Cc1cccc1[N+](=O)[O-])c1ccc2c(c1)CCCC2                                      |
| <b>Mol. weight [g/mol]:</b> | 304.34   |
| <b>CAS:</b>                 | 21848-10-2   |

## Physical Properties

| Property code | Value    | Unit    | Source         |
|---------------|----------|---------|----------------|
| chs           | -9853.70 | kJ/mol  | NIST Webbook   |
| gf            | 601.79   | kJ/mol  | Joback Method  |
| hf            | 351.69   | kJ/mol  | Joback Method  |
| hfs           | 90.33    | kJ/mol  | NIST Webbook   |
| hfus          | 38.60    | kJ/mol  | Joback Method  |
| hvap          | 91.93    | kJ/mol  | Joback Method  |
| log10ws       | -6.51    |         | Crippen Method |
| logp          | 4.538    |         | Crippen Method |
| mcvol         | 234.690  | ml/mol  | McGowan Method |
| pc            | 2079.33  | kPa     | Joback Method  |
| tb            | 976.06   | K       | Joback Method  |
| tc            | 1253.76  | K       | Joback Method  |
| tf            | 602.51   | K       | Joback Method  |
| vc            | 0.922    | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 713.26 | J/molxK | 976.06          | Joback Method |
| cpg           | 726.30 | J/molxK | 1022.34         | Joback Method |
| cpg           | 738.67 | J/molxK | 1068.63         | Joback Method |
| cpg           | 750.59 | J/molxK | 1114.91         | Joback Method |
| cpg           | 762.26 | J/molxK | 1161.19         | Joback Method |
| cpg           | 773.88 | J/molxK | 1207.47         | Joback Method |
| cpg           | 785.68 | J/molxK | 1253.76         | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>                         |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C21848102&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C21848102&amp;Units=SI</a> |

# Legend

|                 |  |
|-----------------|--|
| <b>chs:</b>     | Standard solid enthalpy of combustion                    |
| <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>hfs:</b>     | Solid phase 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>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.cheméo.com/cid/27-869-8/o-Nitrobenzylidene-5-6-7-8-tetrahydronaphthyl-2-acetonitrile.pdf>

Generated by Cheméo on 2024-04-28 15:26:01.543847916 +0000 UTC m=+16607210.464425231.

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