

# 1-Undecanol, 7-chloro, acetate

|                             |   |
|-----------------------------|---|
| <b>Other names:</b>         | 7-Chloroundecyl acetate   |
| <b>Inchi:</b>               | InChI=1S/C13H25ClO2/c1-3-4-9-13(14)10-7-5-6-8-11-16-12(2)15/h13H,3-11H2,1-2H3 |
| <b>InchiKey:</b>            | SDAKADADHFCDKD-UHFFFAOYSA-N   |
| <b>Formula:</b>             | C13H25ClO2  |
| <b>SMILES:</b>              | CCCCC(Cl)CCCCCOC(C)=O   |
| <b>Mol. weight [g/mol]:</b> | 248.79  |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -189.71 | kJ/mol               | Joback Method  |
| hf            | -577.47 | kJ/mol               | Joback Method  |
| hfus          | 32.89   | kJ/mol               | Joback Method  |
| hvap          | 57.69   | kJ/mol               | Joback Method  |
| log10ws       | -4.39   |                      | Crippen Method |
| logp          | 4.298   |                      | Crippen Method |
| mcvol         | 213.710 | ml/mol               | McGowan Method |
| pc            | 1667.33 | kPa                  | Joback Method  |
| ripol         | 1682.00 |                      | NIST Webbook   |
| ripol         | 1689.00 |                      | NIST Webbook   |
| ripol         | 1692.00 |                      | NIST Webbook   |
| ripol         | 1694.00 |                      | NIST Webbook   |
| ripol         | 1682.00 |                      | NIST Webbook   |
| ripol         | 1695.00 |                      | NIST Webbook   |
| ripol         | 2183.00 |                      | NIST Webbook   |
| ripol         | 2172.00 |                      | NIST Webbook   |
| ripol         | 2164.00 |                      | NIST Webbook   |
| ripol         | 2202.00 |                      | NIST Webbook   |
| ripol         | 2190.00 |                      | NIST Webbook   |
| ripol         | 2164.00 |                      | NIST Webbook   |
| tb            | 610.12  | K                    | Joback Method  |
| tc            | 786.44  | K                    | Joback Method  |
| tf            | 323.35  | K                    | Joback Method  |
| vc            | 0.831   | m <sup>3</sup> /kmol | Joback Method  |

# Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 548.21    | J/molxK | 610.12          | Joback Method |
| cpg           | 620.96    | J/molxK | 757.05          | Joback Method |
| cpg           | 607.77    | J/molxK | 727.67          | Joback Method |
| cpg           | 593.91    | J/molxK | 698.28          | Joback Method |
| cpg           | 579.37    | J/molxK | 668.89          | Joback Method |
| cpg           | 564.14    | J/molxK | 639.51          | Joback Method |
| cpg           | 633.51    | J/molxK | 786.44          | Joback Method |
| dvisc         | 0.0001484 | Paxs    | 610.12          | Joback Method |
| dvisc         | 0.0001991 | Paxs    | 562.33          | Joback Method |
| dvisc         | 0.0002822 | Paxs    | 514.53          | Joback Method |
| dvisc         | 0.0004297 | Paxs    | 466.74          | Joback Method |
| dvisc         | 0.0007200 | Paxs    | 418.94          | Joback Method |
| dvisc         | 0.0013781 | Paxs    | 371.14          | Joback Method |
| dvisc         | 0.0031957 | Paxs    | 323.35          | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <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=R33840&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R33840&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>                       |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</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>ripol:</b>  | 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                  |

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