

# nonacosyl acetate

**Inchi:** InChI=1S/C31H62O2/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31  
**InchiKey:** RAYOIJISUSUXAF-UHFFFAOYSA-N  
**Formula:** C31H62O2  
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOC(C)=O  
**Mol. weight [g/mol]:** 466.82

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -23.78  | kJ/mol  | Joback Method  |
| hf            | -927.97 | kJ/mol  | Joback Method  |
| hfus          | 78.83   | kJ/mol  | Joback Method  |
| hvap          | 93.76   | kJ/mol  | Joback Method  |
| log10ws       | -11.66  |         | Crippen Method |
| logp          | 11.102  |         | Crippen Method |
| mcvol         | 455.090 | ml/mol  | McGowan Method |
| pc            | 581.20  | kPa     | Joback Method  |
| rinpol        | 3296.78 |         | NIST Webbook   |
| tb            | 984.97  | K       | Joback Method  |
| tc            | 1231.24 | K       | Joback Method  |
| tf            | 511.29  | K       | Joback Method  |
| vc            | 1.796   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 1615.90   | J/mol×K | 984.97          | Joback Method |
| cpg           | 1732.71   | J/mol×K | 1190.19         | Joback Method |
| cpg           | 1713.09   | J/mol×K | 1149.15         | Joback Method |
| cpg           | 1691.73   | J/mol×K | 1108.10         | Joback Method |
| cpg           | 1668.49   | J/mol×K | 1067.06         | Joback Method |
| cpg           | 1643.25   | J/mol×K | 1026.01         | Joback Method |
| cpg           | 1750.69   | J/mol×K | 1231.24         | Joback Method |
| dvisc         | 0.0000144 | Pa×s    | 984.97          | Joback Method |
| dvisc         | 0.0000198 | Pa×s    | 906.02          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000289 | Pa×s | 827.08 | Joback Method |
| dvisc | 0.0000457 | Pa×s | 748.13 | Joback Method |
| dvisc | 0.0000806 | Pa×s | 669.18 | Joback Method |
| dvisc | 0.0001655 | Pa×s | 590.24 | Joback Method |
| dvisc | 0.0004241 | Pa×s | 511.29 | 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.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>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R437908&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R437908&amp;Units=SI</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/23-596-5/nonacosyl-acetate.pdf>

Generated by Cheméo on 2025-12-06 00:33:53.866432067 +0000 UTC m=+4729431.396472721.

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