

# p-Toluic acid, oct-3-en-2-yl ester

Other names:p-toluylic acid, oct-3-en-2-yl ester

Inchi:InChI=1S/C16H22O2/c1-4-5-6-7-8-14(3)18-16(17)15-11-9-13(2)10-12-15/h7-12,14H,4-6H

InchiKey:BIKMCDGGNKJCJT-BQYQJAHWSA-N

Formula:C16H22O2

SMILES:CCCCC=CC(C)OC(=O)c1ccc(C)cc1

Mol. weight [g/mol]:246.34

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 30.48   | kJ/mol  | Joback Method  |
| hf            | -281.37 | kJ/mol  | Joback Method  |
| hfus          | 30.31   | kJ/mol  | Joback Method  |
| hvap          | 62.87   | kJ/mol  | Joback Method  |
| log10ws       | -5.09   |         | Crippen Method |
| logp          | 4.287   |         | Crippen Method |
| mcvol         | 215.680 | ml/mol  | McGowan Method |
| pc            | 1838.84 | kPa     | Joback Method  |
| rinpol        | 1818.40 |         | NIST Webbook   |
| rinpol        | 1818.40 |         | NIST Webbook   |
| tb            | 677.15  | K       | Joback Method  |
| tc            | 883.85  | K       | Joback Method  |
| tf            | 361.10  | K       | Joback Method  |
| vc            | 0.822   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 578.07 | J/mol×K | 677.15          | Joback Method |
| cpg           | 652.74 | J/mol×K | 849.40          | Joback Method |
| cpg           | 639.64 | J/mol×K | 814.95          | Joback Method |
| cpg           | 625.67 | J/mol×K | 780.50          | Joback Method |
| cpg           | 610.77 | J/mol×K | 746.05          | Joback Method |
| cpg           | 594.92 | J/mol×K | 711.60          | Joback Method |
| cpg           | 665.00 | J/mol×K | 883.85          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000966 | Pa×s | 677.15 | Joback Method |
| dvisc | 0.0001268 | Pa×s | 624.48 | Joback Method |
| dvisc | 0.0001749 | Pa×s | 571.80 | Joback Method |
| dvisc | 0.0002576 | Pa×s | 519.12 | Joback Method |
| dvisc | 0.0004141 | Pa×s | 466.45 | Joback Method |
| dvisc | 0.0007510 | Pa×s | 413.78 | Joback Method |
| dvisc | 0.0016206 | Pa×s | 361.10 | Joback Method |

## Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <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="https://link.springer.com/article/10.1007/BF02311772">https://link.springer.com/article/10.1007/BF02311772</a>                   |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U292505&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U292505&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>                                 |

## 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/89-747-5/p-Toluic-acid-oct-3-en-2-yl-ester.pdf>

Generated by Cheméo on 2025-12-23 06:41:39.872479973 +0000 UTC m=+6220297.402520637.

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