

# (9Z,12Z,15Z)-1-Hydroxy-3-methoxypropan-2-yl octadeca-9,12,15-trienoate

|                      |   |
|----------------------|---|
| Inchi:               | InChI=1S/C22H38O4/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-22(24)26-21(19-23)2 |
| InchiKey:            | FQKUVMVFEWKKLJ-YSTUJMKBSA-N   |
| Formula:             | C22H38O4  |
| SMILES:              | CCC=CCC=CCC=CCCCCCCCC(=O)OC(CO)COC  |
| Mol. weight [g/mol]: | 366.53  |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -103.16 | kJ/mol               | Joback Method  |
| hf            | -680.28 | kJ/mol               | Joback Method  |
| hfus          | 57.88   | kJ/mol               | Joback Method  |
| hvap          | 92.30   | kJ/mol               | Joback Method  |
| log10ws       | -5.92   |                      | Crippen Method |
| logp          | 5.126   |                      | Crippen Method |
| mvol          | 327.120 | ml/mol               | McGowan Method |
| pc            | 1078.51 | kPa                  | Joback Method  |
| rinpol        | 2663.80 |                      | NIST Webbook   |
| rinpol        | 2663.80 |                      | NIST Webbook   |
| tb            | 905.69  | K                    | Joback Method  |
| tc            | 1109.01 | K                    | Joback Method  |
| tf            | 462.67  | K                    | Joback Method  |
| vc            | 1.262   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 1061.39   | J/molxK | 905.69          | Joback Method |
| cpg           | 1078.91   | J/molxK | 939.58          | Joback Method |
| cpg           | 1095.47   | J/molxK | 973.46          | Joback Method |
| cpg           | 1111.14   | J/molxK | 1007.35         | Joback Method |
| cpg           | 1125.98   | J/molxK | 1041.24         | Joback Method |
| cpg           | 1140.05   | J/molxK | 1075.13         | Joback Method |
| cpg           | 1153.43   | J/molxK | 1109.01         | Joback Method |
| dvisc         | 0.0004459 | Paxs    | 462.67          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0001149 | Paxs | 536.51 | Joback Method |
| dvisc | 0.0000411 | Paxs | 610.34 | Joback Method |
| dvisc | 0.0000184 | Paxs | 684.18 | Joback Method |
| dvisc | 0.0000096 | Paxs | 758.02 | Joback Method |
| dvisc | 0.0000056 | Paxs | 831.85 | Joback Method |
| dvisc | 0.0000036 | Paxs | 905.69 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U412847&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U412847&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>                     |

## 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/84-551-7/9Z-12Z-15Z-1-Hydroxy-3-methoxypropan-2-yl-octadeca-9-12-15-trienoate.pdf>

Generated by Cheméo on 2024-04-25 13:57:56.595766621 +0000 UTC m=+16342725.516343942.

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