

# Fumaric acid, 2-methoxyphenyl hept-2-yl ester

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C18H24O5/c1-4-5-6-9-14(2)22-17(19)12-13-18(20)23-16-11-8-7-10-15(16)21-3

BVYKTVGDCDTAGA-OUKQBFOZSA-N

C18H24O5

CCCCC(C)OC(=O)C=CC(=O)Oc1ccccc1OC

320.38

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -291.60 | kJ/mol  | Joback Method  |
| hf            | -699.67 | kJ/mol  | Joback Method  |
| hfus          | 39.47   | kJ/mol  | Joback Method  |
| hvap          | 78.89   | kJ/mol  | Joback Method  |
| log10ws       | -4.50   |         | Crippen Method |
| logp          | 3.669   |         | Crippen Method |
| mcvol         | 257.170 | ml/mol  | McGowan Method |
| pc            | 1606.42 | kPa     | Joback Method  |
| rinpol        | 2278.00 |         | NIST Webbook   |
| rinpol        | 2278.00 |         | NIST Webbook   |
| tb            | 821.62  | K       | Joback Method  |
| tc            | 1028.71 | K       | Joback Method  |
| tf            | 478.03  | K       | Joback Method  |
| vc            | 0.976   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 764.47    | J/mol×K | 821.62          | Joback Method |
| cpg           | 779.39    | J/mol×K | 856.14          | Joback Method |
| cpg           | 793.20    | J/mol×K | 890.65          | Joback Method |
| cpg           | 805.93    | J/mol×K | 925.17          | Joback Method |
| cpg           | 817.60    | J/mol×K | 959.68          | Joback Method |
| cpg           | 828.21    | J/mol×K | 994.20          | Joback Method |
| cpg           | 837.79    | J/mol×K | 1028.71         | Joback Method |
| dvisc         | 0.0005308 | Pa×s    | 478.03          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0002798 | Pa×s | 535.29 | Joback Method |
| dvisc | 0.0001670 | Pa×s | 592.56 | Joback Method |
| dvisc | 0.0001091 | Pa×s | 649.82 | Joback Method |
| dvisc | 0.0000764 | Pa×s | 707.09 | Joback Method |
| dvisc | 0.0000564 | Pa×s | 764.35 | Joback Method |
| dvisc | 0.0000435 | Pa×s | 821.62 | 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=U405932&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405932&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/89-224-5/Fumaric-acid-2-methoxyphenyl-hept-2-yl-ester.pdf>

Generated by Cheméo on 2025-12-23 00:46:10.370774522 +0000 UTC m=+6198967.900815190.

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