

# 1,5-Anhydro-3-o-acetyl-2,4,6-tri-o-methyl-d-glucitol

Other names:

3-O-Acetyl-1,5-anhydro-2,4,6-tri-O-methyl-D-glucitol

Inchi:

InChI=1S/C11H20O6/c1-7(12)17-11-8(14-3)6-16-9(5-13-2)10(11)15-4/h8-11H,5-6H2,1-4H

InchiKey:

UHHBRTSQTUOMIP-VPOLOUISSA-N

Formula:

C11H20O6

SMILES:

COC[C@H]1OC[C@H](OC)[C@H](OC(C)=O)[C@@H]1OC

Mol. weight [g/mol]:

248.28

## Physical Properties

| Property code | Value   | Unit   | Source         |
|---------------|---------|--------|----------------|
| hfus          | 33.62   | kJ/mol | Joback Method  |
| logp          | -0.007  |        | Crippen Method |
| mcvol         | 185.910 | ml/mol | McGowan Method |
| rinpol        | 1566.13 |        | NIST Webbook   |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 525.85    | J/mol×K | 627.12          | Joback Method |
| cpg           | 543.85    | J/mol×K | 659.71          | Joback Method |
| cpg           | 561.01    | J/mol×K | 692.29          | Joback Method |
| cpg           | 577.30    | J/mol×K | 724.88          | Joback Method |
| cpg           | 592.68    | J/mol×K | 757.46          | Joback Method |
| cpg           | 607.10    | J/mol×K | 790.05          | Joback Method |
| cpg           | 620.52    | J/mol×K | 822.64          | Joback Method |
| dvisc         | 0.0010224 | Pa×s    | 373.81          | Joback Method |
| dvisc         | 0.0006464 | Pa×s    | 416.03          | Joback Method |
| dvisc         | 0.0004447 | Pa×s    | 458.25          | Joback Method |
| dvisc         | 0.0003259 | Pa×s    | 500.47          | Joback Method |
| dvisc         | 0.0002506 | Pa×s    | 542.68          | Joback Method |
| dvisc         | 0.0002002 | Pa×s    | 584.90          | Joback Method |
| dvisc         | 0.0001648 | Pa×s    | 627.12          | Joback Method |

# Sources

|                                  |                                                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>             | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C97275519&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C97275519&amp;Units=SI</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>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>Cheméo Relay (1.0):</b>       |                                                                                                                                               |
| <b>Cheméo Relay (1.0, beta):</b> |                                                                                                                                               |

## Legend

|                |                                           |
|----------------|-------------------------------------------|
| <b>cpg:</b>    | Ideal gas heat capacity                   |
| <b>dvisc:</b>  | Dynamic viscosity                         |
| <b>hfus:</b>   | Enthalpy of fusion at standard conditions |
| <b>logp:</b>   | Octanol/Water partition coefficient       |
| <b>mcvol:</b>  | McGowan's characteristic volume           |
| <b>rinpol:</b> | Non-polar retention indices               |

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