# 3,4-Dimethyl-1,2,6-triacetylglucoside

**Inchi:** InChI=1S/C14H22O9/c1-7(15)20-6-10-11(18-4)12(19-5)13(21-8(2)16)14(23-10)22-9(3)17
**InchiKey:** JCKXQNQLWDETEA-VJGVLAAASA-N
**Formula:** C14H22O9
**SMILES:** COC1C(COC(C)=O)OC(OC(C)=O)C(OC(C)=O)C1OC
**Mol. weight [g/mol]:** 334.32

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -937.27 | kJ/mol | Joback Method |
| hf | -1490.17 | kJ/mol | Joback Method |
| hfus | 46.85 | kJ/mol | Joback Method |
| hvap | 82.75 | kJ/mol | Joback Method |
| log10ws | -0.48 | | Crippen Method |
| logp | -0.201 | | Crippen Method |
| mcvol | 237.190 | ml/mol | McGowan Method |
| pc | 1744.82 | kPa | Joback Method |
| rinpol | 1740.00 | | NIST Webbook |
| rinpol | 1751.00 | | NIST Webbook |
| rinpol | 1749.00 | | NIST Webbook |
| tb | 821.25 | K | Joback Method |
| tc | 1024.83 | K | Joback Method |
| tf | 525.47 | K | Joback Method |
| vc | 0.877 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 768.99 | J/mol×K | 821.25 | Joback Method |
| cpg | 784.28 | J/mol×K | 855.18 | Joback Method |
| cpg | 798.10 | J/mol×K | 889.11 | Joback Method |
| cpg | 810.41 | J/mol×K | 923.04 | Joback Method |
| cpg | 821.15 | J/mol×K | 956.97 | Joback Method |
| cpg | 830.24 | J/mol×K | 990.90 | Joback Method |
| cpg | 837.63 | J/mol×K | 1024.83 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0006037 | Pa×s | 525.47 | Joback Method |
| dvisc | 0.0004122 | Pa×s | 574.77 | Joback Method |
| dvisc | 0.0002989 | Pa×s | 624.06 | Joback Method |
| dvisc | 0.0002272 | Pa×s | 673.36 | Joback Method |
| dvisc | 0.0001793 | Pa×s | 722.66 | Joback Method |
| dvisc | 0.0001458 | Pa×s | 771.95 | Joback Method |
| dvisc | 0.0001216 | Pa×s | 821.25 | Joback Method |

# Sources

| | |
|---|---|
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R117565&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |

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