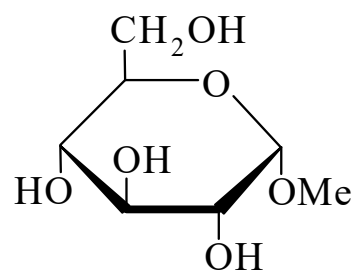




>>Entry Name: Methyl α -D-glucopyranoside, 9CI, 8CI



CAS Registry Number: 97-30-3

Extra CAS Registry Numbers(s): 3149-68-6

Molecular Formula: $C_7H_{14}O_6$

Molecular Weight: 194.184

Accurate Mass: 194.07904

Percentage Composition: C 43.30%; H 7.27%; O 49.44%

Source/Synthesis: Obt. using yeast α -glucosidase

Use/Importance: Inexpensive starting material for synthesis

Melting Point: Mp 168°

Optical Rotation: $[\alpha]_D^{20} +158.9$ (H_2O)

Solubility: V. sol. H_2O

Aldrich: 17044-5

Fluka: 66940

Sigma: M9376

>>Derivative: 6-Ac

Synonym(s): Methyl 6-*O*-acetyl- α -D-glucopyranoside

CAS Registry Number: 4201-66-5

Molecular Formula: $C_9H_{16}O_7$

Molecular Weight: 236.221

Accurate Mass: 236.089605

Percentage Composition: C 45.76%; H 6.83%; O 47.41%

Physical Description: Oil

Optical Rotation: $[\alpha]_D^{21} +151.1$ (c, 1.12 in Me_2CO)

>>Derivative: 2,3-Di-Ac

Synonym(s): Methyl 2,3-di-*O*-acetyl- α -D-glucopyranoside

CAS Registry Number: 29868-42-6

Molecular Formula: $C_{11}H_{18}O_8$

Molecular Weight: 278.258

Accurate Mass: 278.10017

Percentage Composition: C 47.48%; H 6.52%; O 46.00%

Optical Rotation: $[\alpha]_D^{25} +112.4$ (c, 1.0 in H_2O)

>>Derivative: 2,3,4-Tri-Ac

Synonym(s): Methyl 2,3,4-tri-*O*-acetyl- α -D-glucopyranoside

CAS Registry Number: 7432-72-6

Molecular Formula: $C_{13}H_{20}O_9$

Molecular Weight: 320.296

Accurate Mass: 320.110735

Percentage Composition: C 48.75%; H 6.29%; O 44.96%

Melting Point: Mp 111°

Optical Rotation: $[\alpha]_D^{20} +148.8$ ($CHCl_3$)

>>Derivative: 2,3,4,6-Tetra-Ac

Synonym(s): Methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranoside

CAS Registry Number: 604-70-6