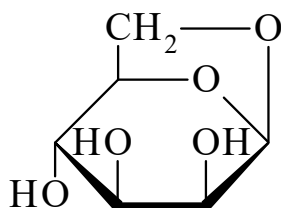




>> **Name:** 1,6-Anhydromannose

Synonym(s): Mannosan



b-D-Pyranose-form

Molecular Formula: C₆H₁₀O₅

Molecular Weight: 162.142

Accurate Mass: 162.052825

Percentage Composition: C 44.45%; H 6.22%; O 49.34%

>> **Variant:** β-D-Pyranose-form

Synonym(s): Levomannosan

CAS Registry Number: 14168-65-1

Molecular Formula: C₆H₁₀O₅

Molecular Weight: 162.142

Accurate Mass: 162.052825

Percentage Composition: C 44.45%; H 6.22%; O 49.34%

Biological Source: Vacuum pyrolysis prod. of Mannose [BWB50-A](#). Occurs in *Phytelephas macrocarpa*

Melting Point: Mp 211°

Optical Rotation: [α]_D −128 (H₂O)

Aldrich: 42375-0

Sigma: A7429

>> **Derivative:** Tri-Ac

Synonym(s): 2,3,5-Tri-*O*-acetyl-1,6-anhydro-β-D-mannopyranose

CAS Registry Number: 13242-48-3

Molecular Formula: C₁₂H₁₆O₈

Molecular Weight: 288.254

Accurate Mass: 288.08452

Percentage Composition: C 50.00%; H 5.59%; O 44.40%

Melting Point: Mp 90-91° (84-86°)

Optical Rotation: [α]_D²² −119 (c, 2.0 in CHCl₃)

>> **Derivative:** 2,3,4-Tribenzoyl

Synonym(s): 1,6-Anhydro-2,3,4-tri-*O*-benzoyl-β-D-mannopyranose

Molecular Formula: C₂₇H₂₂O₈

Molecular Weight: 474.466

Accurate Mass: 474.13147

Percentage Composition: C 68.35%; H 4.67%; O 26.98%

Physical Description: Prisms (EtOH)

Melting Point: Mp 111-112°

Optical Rotation: [α]_D²⁰ −185.2 (c, 1.3 in CHCl₃)

>> **Derivative:** 2-Tosyl

Synonym(s): 1,6-Anhydro-2-*O*-tosyl-β-D-mannopyranose

CAS Registry Number: 97292-00-7

Molecular Formula: C₁₃H₁₆O₇S

Molecular Weight: 316.331

Accurate Mass: 316.061675

Percentage Composition: C 49.36%; H 5.10%; O 35.40%; S 10.14%

Physical Description: Cryst. (Me₂CO/Et₂O)

Melting Point: Mp 146-147°

Optical Rotation: [α]_D¹⁹ −74 (c, 0.5 in Me₂CO)