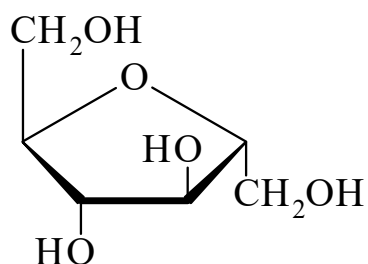




>>Entry Name: 2,5-Anhydromannitol, 9CI



Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

>>Variant: D-form

CAS Registry Number: 41107-82-8

Molecular Formula: C₆H₁₂O₅

Molecular Weight: 164.158

Accurate Mass: 164.068475

Percentage Composition: C 43.90%; H 7.37%; O 48.73%

Use/Importance: Used in studying the tautomeric and anomeric specificity of a number of glycolytic enzymes acting on β-D-fructofuranose and its phosphates

Physical Description: Prisms (EtOH)

Melting Point: Mp 103-104°

Optical Rotation: [α]_D²⁰+58.2 (c, 1.37 in H₂O)

Aldrich: 30226-0

Sigma: A3172

>>Derivative: 3,4,6-Tri-Ac

Synonym(s): 3,4,6-Tri-*O*-acetyl-2,5-anhydro-D-mannitol

CAS Registry Number: 84446-97-9

Molecular Formula: C₁₂H₁₈O₈

Molecular Weight: 290.269

Accurate Mass: 290.10017

Percentage Composition: C 49.65%; H 6.25%; O 44.10%

Physical Description: Syrup

Optical Rotation: [α]_D+32 (c, 1.0 in CHCl₃)

>>Derivative: Tetra-Ac

Synonym(s): 1,3,4,6-Tetra-*O*-acetyl-2,5-anhydro-D-mannitol

CAS Registry Number: 65729-88-6

Molecular Formula: C₁₄H₂₀O₉

Molecular Weight: 332.307

Accurate Mass: 332.110735

Percentage Composition: C 50.60%; H 6.07%; O 43.33%

Physical Description: Oil

Optical Rotation: [α]_D+26 (c, 1.0 in CHCl₃)

>>Derivative: 1,6-Dibenzoyl

Synonym(s): 2,5-Anhydro-1,6-di-*O*-benzoyl-D-mannitol

Molecular Formula: C₂₀H₂₀O₇

Molecular Weight: 372.374

Accurate Mass: 372.120905

Percentage Composition: C 64.51%; H 5.41%; O 30.08%

Physical Description: Cryst. (CH₂Cl₂/pentane)

Melting Point: Mp 102-104°

Optical Rotation: [α]_D²³+31.4 (c, 1.5 in MeOH)