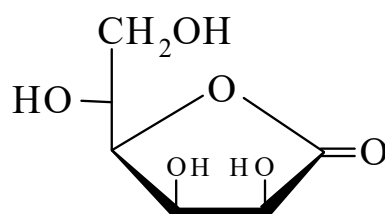




>>Entry Name: 1,4-Mannonolactone

Synonym(s): manno-Hexono-1,4-lactone. γ -Mannolactone



D-*form*

Molecular Formula: C₆H₁₀O₆

Molecular Weight: 178.141

Accurate Mass: 178.04774

Percentage Composition: C 40.45%; H 5.66%; O 53.89%

>>Variant: D-form

CAS Registry Number: 26301-79-1

Molecular Formula: C₆H₁₀O₆

Molecular Weight: 178.141

Accurate Mass: 178.04774

Percentage Composition: C 40.45%; H 5.66%; O 53.89%

Melting Point: Mp 152°

Optical Rotation: $[\alpha]_D +51.8$ (H₂O)

>>Derivative: 2,3,5,6-Tetra-Ac

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

Molecular Formula: C₁₄H₁₈O₁₀

Molecular Weight: 346.29

Accurate Mass: 346.09

Percentage Composition: C 48.56%; H 5.24%; O 46.20%

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 120°

Optical Rotation: $[\alpha]_D^{20} +52$ (H₂O)

>>Derivative: 2,6-Ditosyl

Synonym(s): 2,6-Di-*O*-tosyl-D-mannono-1,4-lactone

CAS Registry Number: 146820-58-8

Molecular Formula: C₂₀H₂₂O₁₀S₂

Molecular Weight: 486.52

Accurate Mass: 486.06544

Percentage Composition: C 49.38%; H 4.56%; O 32.89%; S 13.18%

Physical Description: Cryst. (CHCl₃)

Melting Point: Mp 142-143°

Optical Rotation: $[\alpha]_D^{20} +47$ (c, 2.0 in Me₂CO)

>>Derivative: 2,3-*O*-Isopropylidene

Synonym(s): 2,3-*O*-Isopropylidene-D-mannono-1,4-lactone

Molecular Formula: C₉H₁₄O₆

Molecular Weight: 218.206

Accurate Mass: 218.07904

Percentage Composition: C 49.54%; H 6.47%; O 43.99%

Physical Description: Needles (Me₂CO/petrol)

Melting Point: Mp 133°

Optical Rotation: $[\alpha]_D^{20} +55.4$ (c, 1.62 in H₂O)

>>Derivative: 2,3:5,6-Di-*O*-isopropylidene

Synonym(s): 2,3:5,6-Di-*O*-isopropylidene-D-mannono-1,4-lactone

CAS Registry Number: 14440-56-3