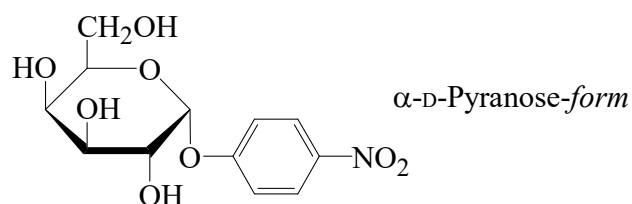




>>Entry Name: 4-Nitrophenyl galactoside, 9CI



Molecular Formula: C₁₂H₁₅NO₈

Molecular Weight: 301.252

Accurate Mass: 301.079769

Percentage Composition: C 47.84%; H 5.02%; N 4.65%; O 42.49%

Sigma: N1252

>>Variant: α -D-Pyranose-form

CAS Registry Number: 7493-95-0

Molecular Formula: C₁₂H₁₅NO₈

Molecular Weight: 301.252

Accurate Mass: 301.079769

Percentage Composition: C 47.84%; H 5.02%; N 4.65%; O 42.49%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 170-171°

Optical Rotation: [α]_D +220 (c, 0.4 in H₂O)

>>Derivative: Tetra-Ac

CAS Registry Number: 17042-39-6

Molecular Formula: C₂₀H₂₃NO₁₂

Molecular Weight: 469.401

Accurate Mass: 469.122029

Percentage Composition: C 51.18%; H 4.94%; N 2.98%; O 40.90%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 132-133°

Optical Rotation: [α]_D +204 (c, 0.68 in CHCl₃)

>>Variant: β -D-Pyranose-form

CAS Registry Number: 3150-24-1

Molecular Formula: C₁₂H₁₅NO₈

Molecular Weight: 301.252

Accurate Mass: 301.079769

Percentage Composition: C 47.84%; H 5.02%; N 4.65%; O 42.49%

Use/Importance: Substrate for detn. of β -galactosidase activity using uv monitoring of 4-nitrophenol release

Physical Description: Cryst. (hydrate)

Melting Point: Mp 181-182° (hydrate)

Optical Rotation: [α]_D²² -84 (c, 0.3 in H₂O)

>>Derivative: Tetra-Ac

CAS Registry Number: 2872-66-4

Molecular Formula: C₂₀H₂₃NO₁₂

Molecular Weight: 469.401

Accurate Mass: 469.122029

Percentage Composition: C 51.18%; H 4.94%; N 2.98%; O 40.90%

Physical Description: Cryst.

Melting Point: Mp 145-146°

Optical Rotation: [α]_D²² -10 (c, 2 in CHCl₃)

References: