



Melting Point: Mp 154-160°
Optical Rotation: $[\alpha]_{\text{D}}^{20} -38$ (c, 0.82 in CHCl₃)
Other Data: Becomes anisotropic at *ca.* 100°

>>**Derivative:** 3,4,6-Tribenzyl, 1-benzoyl
Synonym(s): 2-Acetamido-1-*O*-benzoyl-3,4,6-tri-*O*-benzyl-2-deoxy-β-D-glucopyranose

Molecular Formula: C₃₆H₃₇NO₇
Molecular Weight: 595.691
Accurate Mass: 595.257004
Percentage Composition: C 72.59%; H 6.26%; N 2.35%; O 18.80%
Physical Description: Needles (EtOH/petrol)
Melting Point: Mp 147-148°
Optical Rotation: $[\alpha]_{\text{D}}^{20} -11.1$ (c, 0.54 in CHCl₃)

>>**Variant:** α-D-Furanose-form

Molecular Formula: C₈H₁₅NO₆
Molecular Weight: 221.21
Accurate Mass: 221.089939
Percentage Composition: C 43.44%; H 6.83%; N 6.33%; O 43.40%

>>**Derivative:** 1-Benzoyl, 3,5,6-tri-Ac
Synonym(s): 2-Acetamido-3,4,6-tri-*O*-acetyl-1-*O*-benzoyl-2-deoxy-α-D-glucofuranose

Molecular Formula: C₂₁H₂₅NO₁₀
Molecular Weight: 451.429
Accurate Mass: 451.147849
Percentage Composition: C 55.87%; H 5.58%; N 3.10%; O 35.44%
Optical Rotation: $[\alpha]_{\text{D}}^{20} +110$ (c, 0.3 in CHCl₃)

>>**Derivative:** 4-Nitrophenyl glycoside
Synonym(s): 4-Nitrophenyl 2-acetamido-2-deoxy-α-D-glucofuranoside

CAS Registry Number: 14948-96-0
Molecular Formula: C₁₄H₁₈N₂O₈
Molecular Weight: 342.305
Accurate Mass: 342.106318
Percentage Composition: C 49.12%; H 5.30%; N 8.18%; O 37.39%
Use/Importance: Chromogenic substrate for *N*-acetyl-β-glucosaminidase detn.
Melting Point: Mp 206-207°
Optical Rotation: $[\alpha]_{\text{D}}^{20} +19$ (c, 0.1 in H₂O)

>>**Variant:** DL-form

Molecular Formula: C₈H₁₅NO₆
Molecular Weight: 221.21
Accurate Mass: 221.089939
Percentage Composition: C 43.44%; H 6.83%; N 6.33%; O 43.40%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 184-191 dec.°

References: